

NEW RECORD OF RM235.9 BILLION IN INVESTMENTS

Quality projects dominate private investments in 2014

RM95.5 BILLION IN NKEA PROJECTS

ETP-related projects among the year's biggest investments

MALAYSIA IS WORLD'S 15TH MOST ATTRACTIVE FDI DESTINATION

Malaysia rises 10 places in A.T. Kearney's FDI Confidence Index



MAKING OUR MARK



MALAYSIA INVESTMENT PERFORMANCE REPORT 2014



MALAYSIA INVESTMENT PERFORMANCE 2014

CONTENTS

A WORD FROM MIDA 4

Investors capitalised on uniquely Malaysian ecosystems and regional synergies in 2014 as they consolidated their positions ahead of the ASEAN Economic Community.

OUT-BRAIN. OUT-PLAN. OUT-LOOK. 8

As competition for investment dollars intensifies across Asia, Malaysia's investment promotion agencies must align their collective efforts to the national investment agenda.

East Coast Economic Region Development Council (ECERDC)	10
Iskandar Regional Development Authority (IRDA)	11
Northern Corridor Implementation Authority (NCIA)	12
Sabah Economic Development and Investment Authority (SEDIA)	13
Sarawak Corridor of Renewable Energy (SCORE)	13
InvestKL	14
Collaborative Research in Engineering, Science and Technology (CREST)	14
Multimedia Development Corporation (MDeC)	16
Halal Development Corporation (HDC)	16
BioTechCorp	17
TalentCorp	18

MALAYSIA: EPICENTRE OF ASEAN 20

Despite falling commodity prices and economic instability, Malaysia and ASEAN continue to attract the interest of foreign investors.

MANUFACTURING DONE RIGHT 24

Led by capital-intensive investments in flagship industries, the manufacturing sector is on course for a healthy transformation.

Capital intensity of manufacturing projects	27
Ownership of manufacturing projects	27
Manufacturing projects approved in 2014	29
Electrical & electronic products	29
Malaysia's E&E industry is moving rapidly up the value chain in emerging technologies	32
Transport equipment	33
Automotive	33
Aerospace	34
Shipbuilding & ship repair	35
Machinery & equipment	35
Engineering support	36
Basic and fabricated metal products	37
Textiles & textile products	38
Medical devices	39
Agriculture & food processing	40
Pharmaceuticals	41
Biotechnology	42
Oil palm products and palm biomass	43
Chemicals & chemical products	45
Petroleum & petrochemical products	45
Plastic products	45
Rubber products	47
Wood & wood products	48
Non-metallic mineral products	48
Paper, printing & publishing	48

SERVICES WITH A SMILE 50

The tertiarisation of Malaysia picked up pace in 2014 as the country's services sector positions itself to be one of the strongest in the region.

Regional establishments & logistics 51

Global Operations Hubs	52	Treasury Management	
Operational Headquarters	53	Centres (TMCs)	55
International Procurement		Representative Offices (REs)/	
Centres (IPCs)	53	Regional Offices (ROs)	55
Regional Distribution		Logistics	55
Centres (RDCs)	54		

Oil & gas services	56		
Renewable energy	56		
Energy efficiency & conservation	57		
Engineering services	57		
Research & development (R&D)	58		
Information & Communications Technology (ICT)	59		
Real estate (housing)	59		
Transport	62		
Telecommunications	62		
Utilities	62		
Financial services	62		
Distributive trade	62		
Education services	62		
Hotels and tourism	63		
Healthcare services	63		
Other Services	63		

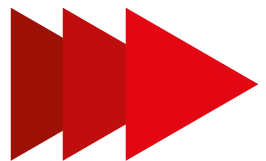
LOOKING EAST 64

If you want to be in Asia, look no further than Malaysia.

APPENDICES 68

A WORD FROM MIDA

Investors capitalised on uniquely Malaysian ecosystems and regional synergies in 2014 as they consolidated their positions ahead of the ASEAN Economic Community.



• • • • •



“Malaysia also jumped a remarkable 10 places to become the 15th most attractive destination for FDI in the A.T. Kearney Foreign Direct Investment Confidence Index.”

10 places to become the 15th most attractive destination for FDI in the A.T. Kearney Foreign Direct Investment Confidence Index, leaving the country in a very strong position to achieve its future investment promotion goals.

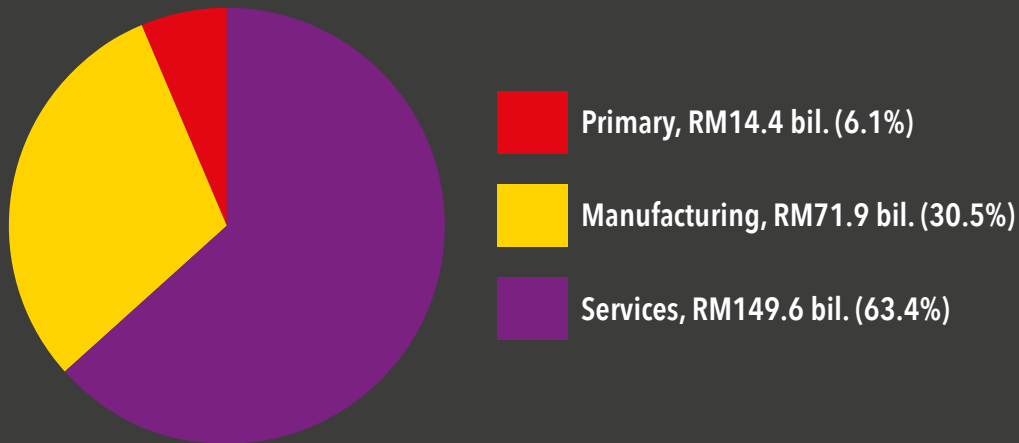
All this comes during a time of rapid change in Malaysia's industry, as the country begins to make its final transition into a high-income economy. The Economic Transformation Programme is so far on target with its goal of transforming Malaysia into a developed nation by 2020. Gross National Income (GNI) per capita rose by over 25 per cent within the first three years of the launch of the ETP, from USD8,150 in 2010 to USD10,430 in 2013. This puts the country above the “upper middle income” bracket as it is defined by the World Bank. By 2020, Malaysia intends to have a GNI per capita of USD15,000.

The quality of the investments approved in 2014 brings Malaysia one-step closer to achieving that target, but the transition will also require a period of adjustment, both for investors as well as the country's labour force. Malaysia has become more selective in its investment agenda, preferring quality investments in targeted ecosystems that are projected to have significant knock-on effects throughout the domestic economy. In 2014, the country attracted a record RM235.9 billion in mostly high quality private investments that will fund 5,942 approved projects and are expected to create 178,365 new jobs. Realised private investments measured in terms of Gross Fixed Capital Formation (GFCF) totalled RM181.5 billion.

The country's investment performance in 2014 far exceeds the average annual investment target of RM148 billion set under the Tenth Malaysia Plan (10MP). The ratio of foreign and domestic investments is also in line with the Government's targets, with 72.6 per cent (RM171.3 billion) being contributed by domestic sources and 27.4 per cent

MALAYSIA'S INVESTMENT PROMOTION EFFORTS KEPT it at the forefront of investment destinations in 2014. The country's improved business-friendly climate has been recognised by the World Bank Doing Business 2014 Report, which pushed Malaysia up to the sixth position among 189 economies in terms of Ease of Doing Business. This puts the country ahead of several notable economies that it has benchmarked itself against such as Republic of Korea, Norway, the United Kingdom and Australia. Malaysia also jumped a remarkable

TOTAL INVESTMENTS APPROVED IN MALAYSIA, 2014 (RM billion)



TOTAL: RM 235.9 BILLION

(RM64.6 billion) coming from foreign sources. Investments in National Key Economic Areas (NKEAs) amounted to an impressive RM95.5 billion or 40.5 per cent of total investments. There were also significant investments in projects approved within the Non-NKEAs which amounted to RM140.4 billion.

SUCCESS UPON SUCCESS

The investments in 2014 underscore Malaysia's transformation into a high-income economy, with several quality projects in advanced technologies and manufacturing services featuring prominently among the year's biggest projects.

The services sector remains the biggest magnet for investments, attracting a total of 5,059 approved projects in 2014 with investments amounting to RM149.6 billion. Domestic investments amounted to RM131.9 billion of this total, while foreign investments totalled RM17.7 billion. The projects approved are expected to create 98,543 job opportunities.

The manufacturing sector proved no less attractive to investors in 2014. Approved investments surged by 38 per cent to RM71.9

billion in 2014 compared with RM52.1 billion in 2013. About 55.1 per cent of these investments (RM39.6 billion) came from foreign sources while 44.9 per cent were domestic (RM32.3 billion). Overall, new projects made up 60.5 per cent of all manufacturing projects approved with investments of RM43.5 billion.

The primary sector accounted for RM14.4 billion of approved investments in 2014. Foreign investments amounted to RM7.3 billion (50.7%) while domestic investments made up RM7.1 billion (49.3%). The mining sub-sector leads the other sub-sectors with approved investments reaching RM13.4 billion in 36 projects.

One reason for the country's sterling performance in recent years is the excitement surrounding the implementation of the ASEAN Economic Community. Economically, ASEAN is already the world's seventh-largest economy, with an expected rise to fifth place by 2018. As one of the region's most diverse and well-connected economies, Malaysia is uniquely positioned to offer investors just the right balance of costs and benefits, giving businesses first-world infrastructure and talent, but at a fraction of the costs of neighbouring hubs. MIDA's records show that investments into

expansion and diversification projects have consistently comprised a substantial share to the value of total investments approved every year. This reflects the continued confidence of these investors in Malaysia's future.

ALL ABOARD FOR AEC

Many of Malaysia's investments in 2014 stem from multinational businesses that are eager to be part of the economic powerhouse that the AEC seems destined to become. Approved foreign investments into Malaysia rose by over eight per cent to RM64.6 billion in 2014 from RM59.4 billion in 2013. It is also worth noting that about 73 per cent of approved foreign investments within Malaysia's manufacturing sector came from Asian trading partners like Japan, China, Singapore and the Republic of Korea.

Malaysia is approaching the halfway mark in its quest to become a developed nation. Competition for investment and trade is becoming stiffer, especially from neighbouring countries that are eager to have their slice of the AEC pie. The ASEAN Comprehensive Investment Agreement (ACIA) is expected to facilitate the transformation of ASEAN into an

investment hub that will be able to compete effectively with other emerging economies in attracting FDI and intra-ASEAN investment. All ASEAN states are working hard to meet the targets set for the progressive liberalisation of trade in goods and services, cooperation in customs and trade facilitation, as well as a reduction of costs and barriers in doing business within the region. The benefits of ACIA have also been extended to foreign investors who are based in ASEAN, and that includes Malaysia.

While MIDA will continue to drive investment promotion, we will be more selective in picking our targets. We will seek export-oriented projects that involve high technology and which involve a high degree of knowledge, skills and capital. We will also seek projects that have a high GNI impact and have strong linkages with domestic industries. MIDA will also leverage upon new sources of competitive advantage and take the lead in bridging the human capital needs of individual capital investors.

The AEC steamship is gathering momentum, and Malaysia is in the driver's seat. Buckle up, and enjoy the ride.





As competition for investment dollars intensifies across Asia, Malaysia's investment promotion agencies must align their collective efforts to the national investment agenda.



• • • • •



YB Dato' Sri Mustapa Mohamed, Minister of International Trade and Industry leading an industry networking session in Terengganu. With him are Dato' Azman Mahmud, CEO of MIDA and Wan Hasnan Abdullah, General Manager, PETRONAS Eastern Coast.

MALAYSIA STOOD OUT AS A BEACON OF INVESTOR confidence in 2014. While global economic recovery was threatened by uneven levels of growth, economic fragility and unpredictable political climates in a number of economies, private investment in Malaysia rose to a record high of RM235.9 billion in 2014, over 7.5 per cent more than the RM219.4 billion recorded in 2013. As at 31 December 2014, realised private investments measured in terms of Gross Fixed Capital Formation (GFCF) totalled RM181.5 billion.

The investments in 2014 will fund a total of 5,942 projects and are expected to create 178,365 new jobs, many of which are in high-technology and high value-added industries. Of the total investments approved, RM171.3 billion (72.6%) came from domestic sources as Malaysian businesses continue to respond favourably to the Government's call for domestic investments to lead the way in the country's economic growth, while the rest (RM64.6 billion or 27.4%) came from foreign sources.

Under the Economic Transformation Programme, Malaysia has successfully implemented the 12 National Key Economic Areas (NKEAs) and six Strategic Reform Initiatives (SRIs). These achievements will help strengthen the public sector, especially in the six SRI sectors, namely Public Finance, Government's Role in Business, Human Capital Development, Public Service Delivery, International Standards and Liberalisation, and Narrowing Disparities (Bumiputera SMEs). NKEA investments approved in 2014 amounted to 40.5 per cent of total investments (RM95.5 billion), while non-NKEAs attracted RM140.4 billion in investments.

The Government's drive to progressively liberalise the services sector's competitiveness continued to bear dividends in 2014 as it raked in RM149.6 billion in 5,059 projects. About 88.2 per cent (RM131.9 billion) of this total came from domestic sources, with the rest (RM17.7 billion) coming from foreign sources. This increased tertiarisation is an indicator of a fully-developed economy, and the massive expansion of the services sector is expected to create 98,543 job opportunities. The real estate sub-sector alone attracted RM88.5 billion in approved investments. The utility, distributive trade, financial services and hotel and tourism sectors came next with RM9.0 billion, RM8.7 billion, RM6.9 billion and RM6.7 billion in approved investments respectively.

Despite the appeal of the services sector, investors nonetheless continued to show great interest in Malaysia's manufacturing sector, investing RM71.9 billion in 811 approved projects. More than half of these investments (RM39.6 billion or 55.1%) came from foreign investors while the rest (RM32.3 billion or 44.9%) came from Malaysians. Similarly, most of the RM14.4 billion approved investments into

the primary sector came from foreign sources (RM7.3 billion), with 36 approved projects worth RM13.4 billion in the mining sub-sector alone. The plantation and commodities sector brought in RM724.2 million worth of investments while the agriculture sector registered RM250.5 million of investments.

PARTNERS IN SUCCESS

The Government has worked hard to improve Malaysia's competitiveness by fine-tuning its investment policies and incentives in accordance with global economic trends. While Malaysia has positioned itself as a technological hub that adds value to knowledge-intensive and innovation-based industries, the Government is also keen on encouraging investors to further expand their operations in the country. These efforts have paid off, especially in the manufacturing sector, where the value of approvals on diversification and expansion investments comprised 39.5 per cent (RM28.4 billion) of the total investments approved within the sector.

"While Malaysia has positioned itself as a technological hub that adds value to knowledge-intensive and innovation-based industries, the Government is also keen on encouraging investors to further expand their operations in the country."

Within the context of the Government's ecosystem approach to investment development, the Malaysian Investment Development Authority (MIDA) continued to perform a valuable role in liaising with industry players and strategic government agencies to create an investor-friendly environment. These include regional investment promotion agencies such as Invest KL, the East Coast Economic Region Development Council (ECERDC), the Northern Corridor Implementation Authority (NCIA), the Iskandar Regional Development Authority (IRDA) and the Sabah Economic Development and Investment Authority (SEDIA). It also includes several agencies with strategic mandates such as the Collaborative Research in Engineering, Science and Technology (CREST) agency, Halal Development Corporation (HDC),

Multimedia Development Corporation (MDeC), the Sarawak Corridor of Renewable Energy (SCORE), TalentCorp Malaysia and Malaysia Biotechnology Corporation (BioTechCorp).

East Coast Economic Region Development Council (ECERDC)



Blessed with rich natural resources and strategically located facing the South China Sea, the East Coast Economic Region (ECER) is an ideal gateway for investors that are keen on tapping into the ASEAN and Asia Pacific markets. Encompassing the regions of Kelantan, Terengganu, Pahang and the District of Mersing, Johor, ECER's transformation into a world-class investment destination is mainly attributed to the efforts of the Federal

Government through the East Coast Economic Region Development Council (ECERDC). The Malaysian Government approved RM6.6 billion for 111 infrastructure and human capital development projects and programmes in ECER under the Ninth and Tenth Malaysia Plans.

ECER's allure lies in its highly attractive package of fiscal and non-fiscal incentives, considered among the best in the country. It attracted RM15.68 billion in investments in 2014, of which RM12.40 billion (79.1%) is destined for Pahang with the rest headed for Kelantan (RM1.75 billion) and Terengganu (RM1.53 billion). This brings the total amount of investments in ECER up to RM77.26 billion, thus surpassing the halfway mark of its RM110 billion investment target by 2020. The investments in ECER are expected to create over 73,000 job opportunities for Malaysians. More than half of these investments are in manufacturing projects worth RM39.2 billion.

Among the notable highlights of 2014 was the Memorandum of Understanding (MoU) between Kuantan Port City and Qinzhou Port that will allow the two parties to leverage logistics and port industry synergies between Malaysia-China Kuantan Industrial Parks (MCKIP) and China-Malaysia Qinzhou Industrial Park (CMQIP). Kuantan Port is currently being expanded into a deepwater port and will

"ECER's allure lies in its highly attractive package of fiscal and non-fiscal incentives, considered among the best in the country."

play a vital role in attracting more trade and investments into the ECER. Once completed, the port's throughput is expected to double to 52 million freight weight tonnes (FWT) of cargo, thus enhancing the position of MCKIP as well as Kuantan Port City. The MoU with Qinzhou Port will promote Kuantan Port and Kuantan Port City as a regional terminal and logistics hub.

Another highlight of 2014 was a new project by BASF Petronas Chemicals Sdn Bhd worth RM2.86 billion to manufacture the downstream petrochemical products in Gebeng Industrial Park, Kuantan. Gebeng will also host a new project worth RM420 million by Kaneka Group of Japan to make modacrylic fibres. Felda Global Ventures Downstream Sdn Bhd (FGVD) has also committed to invest RM80 million in a Vitamin E processing plant in the Kuantan Integrated BioPark, while Beijing Goldenway Biology Tech Co Ltd will invest RM600 million into a factory to produce bio-humic acid from oil palm waste in Jengka.

Iskandar Regional Development Authority (IRDA)



Between January and October 2014, Iskandar Malaysia secured RM24.87 billion in new investments as IRDA continued its efforts

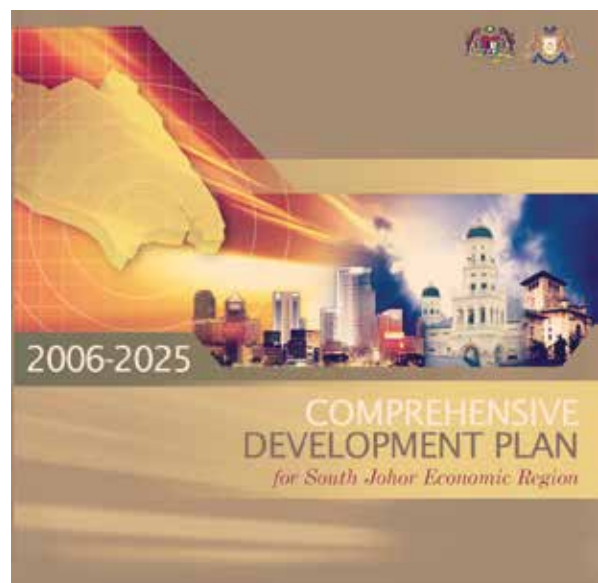
to ensure sustainable development in the region. This brings its total cumulative committed investments to RM156.51 billion, of which 51 per cent (RM79.17 billion) have been realised. The manufacturing sector accounts for about a third of the region's total investments to date (RM50.97 billion), most of which is in high value-added industries within the Electrical & Electronics (E&E), Petrochemical, Oleochemical and Food and Agro-processing sub-sectors. This is followed by the logistics (RM4.81 billion), tourism (RM2.67 billion), healthcare (RM2.59 billion), education (RM1.56 billion), financial services (RM1.32 billion) and creative industries



PHOTO Artist's impression of an aerial view of Kuantan Port after its expansion

(RM0.56 billion). Property development has contributed RM30.38 billion in cumulative investments as of 31 October 2014, followed by utilities (RM12.64 billion), infrastructure (RM8.31 billion) and emerging technologies (RM2.12 billion). Domestic businesses hold about 63 per cent of these investments (RM99 billion), while the rest are held by foreign businesses (RM57.5 billion).

A key milestone of 2014 was the publication of the enhanced Iskandar Malaysia Comprehensive Development Plan II (CDP II) to ensure that the region's development is realigned with recent economic and socio-political developments. IRDA also rolled out various programmes to support its Social Agenda such as the Kawan Iskandar Malaysia (KIM) programme. KIM will encourage local communities to participate more actively in the region's economic development and involves



14 subdistricts with low-income families. IRDA also organised the inaugural Iskandar Malaysia Social Media Awards to recognise and honour unsung heroes in the local community. The awards saw 170 nominations for 12 categories. Twenty-two non-governmental organisations (NGOs) and individuals were honoured in the ceremony.

IRDA has taken the lead in promoting sustainable growth with the publication of the Green Economy Guidelines (GEG) Manual in 2014. This comes after Iskandar Malaysia received the distinction of becoming a partner region for the Global Energy Efficiency Accelerator Platform (GEEAP), a flagship programme for the Sustainable Energy for All (SE4ALL) initiative led by the United Nations Secretary-General and the President of the World Bank. Iskandar Malaysia was selected through its Low Carbon Society Blueprint for Iskandar Malaysia (LCSBPIM), which outlines strategies to reduce Iskandar Malaysia's carbon intensity emissions by 50 per cent once it reaches maturity in 2025.

Northern Corridor Implementation Authority (NCIA)



The Northern Corridor Implementation Authority (NCIA) was established as the

authority responsible for providing direction and to devise policies and strategies in relation to socio-economic development in the Northern Corridor Economic Region (Koridor Utara) of Perlis, Kedah, Pulau Pinang and North Perak. The region attracted RM6.7 billion in investments and created 9,851 jobs in the first half of 2014, with major investments in the tourism and manufacturing sectors. Overall, the region has created some 70,856 employment and business opportunities since 2010 with investments from domestic businesses as well as Japan, United States, and other European countries.

The Perlis Strategic Development Plan has revealed 64 potential high-impact projects worth more than RM34.5 billion to be executed from 2013 to 2030. These investments will not only bring about socio-economic gains but are also expected to boost Malaysia's position in research and agricultural development, especially in developing high-technology



PHOTO Koridor Utara Biotech Centre, Batu Kawan

agriculture practice. The strategic plan includes the development of the Chuping Valley and is complemented by the Greater Kamunting Development Plan, which has identified 34 entry-point projects amounting to RM18 billion to be executed over the same period. This plan will see development spreading beyond the traditional areas in Kamunting and rejuvenate old industrial parks in Perak.

Koridor Utara's cumulative engineering experience over the past 40 years has largely focused on assembly and test operations. NCIA has been looking at designing a completely new manufacturing ecosystem for Koridor Utara by venturing into new growth sectors

"The Perlis Strategic Development Plan has revealed 64 potential high-impact projects worth more than RM34.5 billion to be executed from 2013 to 2030."

such as medical devices and solar. The agency is also intensifying its efforts to give the region greater prominence in medical tourism, working closely with private hospitals and the Malaysia Health Travel Council (MHTC) to participate in medical and healthcare exhibitions. It is encouraging hospitals in Koridor Utara to build their capabilities in specialised fields such as oncology, cardiology, minimally invasive surgery and ambulatory care.

Sabah Economic Development and Investment Authority (SEDIA)



The Sabah Economic Development and

Investment Authority (SEDIA) had a busy year promoting investments within the Sabah Development Corridor (SDC), participating in numerous events and trade missions. The region has attracted a total of RM138.1 billion in investments since its launch in 2008, of which RM50.4 billion has been realised thus far.

SEDIA's first major event in 2014 was the public SDC Innovation Forum in Kota Kinabalu, which included participants from the Institute of Technology, Tallaght of Ireland. The objective of the public forum was to brainstorm various approaches to enhancing human capital in Sabah. SEDIA also stepped up the 1Agro-SAIP programme with four courses for potential agri-entrepreneurs and SME incubators at the Sabah Agro-Industrial Precinct (SAIP). SAIP will become a centre of excellence in agro-biotechnology, optimising the State's biodiversity and abundant natural resources to produce higher value-added food and specialty products based on botanicals, aquatic plants and animals.

In 2014, the Kimanis Power Plant began full operations and is expected to add an additional 95 MW of electricity to the state's energy grid. This is expected to make the SDC an even more exciting investment destination as development ripples throughout the state. The real estate sub-sector is seeing greater expansion of more



PHOTO Panelists at the SDC Innovation Public Forum in March 2014

premium property development within a 5km radius of Kota Kinabalu as the Kota Kinabalu City Waterfront (KKCW) Entry Point Project begins to gain traction.

Sarawak Corridor of Renewable Energy (SCORE)



Sarawak Corridor of Renewable Energy (SCORE) is a development initiative undertaken by the Government to accelerate the state's

economic growth towards the year 2020. SCORE's major advantage is its abundant energy resources: 20,000 MW of potential hydropower, 1.46 billion tons of coal and 40.9 trillion square cubic feet of natural gas. The core strategy behind SCORE is to accelerate the development of Sarawak's energy resources and allow Sarawak to price its power competitively and attract investments in energy-intensive industries.

This rapid industrialisation is targeted to take place in the Samalaju Industrial Park. With over 8,000 hectares in available land, dedicated port facilities in nearby Bintulu as well as a new township, Samalaju is one of the country's most important industrial parks. It has attracted 15 companies with total committed investments of RM25.2 billion to date. Four companies have commenced operations, two are under construction and three are preparing their sites. The other companies are in various stages of pre-implementation.

The projects within Samalaju are high-technology manufacturing plants that will

complement strategic industrial ecosystems in solar panel manufacturing, steel production and logistics. The aluminium smelting, ferro-alloy and polycrystalline silicon plants will trigger other investments within downstream industries that will ultimately result in thousands of high-income opportunities for Malaysians.

InvestKL



InvestKL works hand-in-hand with the MNCs to understand their investment needs and to tailor-make suitable packages and incentives. The agency's main goal is

to attract 100 major multinational corporations (MNCs) to establish major operational headquarters in the Greater KL and Klang Valley by 2020. In 2014, the agency successfully added 14 MNCs to its list of clients, bringing the number of MNCs with major headquarters in the Klang Valley to 46.

InvestKL also continued to encourage MNCs to develop more high-value activities such as intellectual property (IP) creation and innovation and partnerships with Malaysian communities. The agency collaborates with other agencies to improve Greater KL's business ecosystem to support MNCs' regional operations and control tower activities in the city. The new customised principal hub incentives announced in Budget 2015 will make Greater KL even more attractive to MNCs wanting to establish global operational centres in the region.

Collaborative Research in Engineering, Science and Technology (CREST)



Having entered its second year of operation, CREST continues to

spearhead collaborations between industry, academia and government organisations in the development of Malaysia's Electrical and Electronics (E&E) industry. With support from MIDA and other sponsors, CREST Symposium 2014 drew an audience of close to 200 people and featured 2014 Nobel Prize laureate



PHOTO The Murum gravity dam while it was under construction. The dam's reservoir began to fill in July 2013 and the first generator was tested in December 2014

Professor Shuji Nakamura – the “Father of GaN Blue LED”.

The CREST R&D Grant continues to bring value to the country's R&D ecosystem through its unique model. E&E companies and universities are finding synergies and sparking new ideas, new innovations and new products while nurturing industry-relevant talent and expertise. Eight out of the 10 projects awarded grants in 2012 were completed in 2014, with outcomes from three projects slated for to be explored further. The programme now has 22 local companies, 15 MNCs and 16 universities working on 74 projects with a total value of RM61 million. In September 2014, CREST launched a Targeted R&D Grant scheme to drive research collaborations in specific target areas such as optoelectronics/LED, Internet of Things (IoT) and integrated circuit (IC) design.

In 2014, CREST established a strategic collaboration with the University of California Santa Barbara (UCSB) to benefit local companies in the development of the next generation of LEDs and laser lighting. The CREST-UCSB collaboration involves four Malaysian institutes of higher learning (IHLs) and three Malaysian LED manufacturers. CREST is also working hard to formalise its collaboration on Large Area Electronics research with Cambridge University, UK. Large area printable electronics are a key technology in developing flexible wearable electronics in many Internet of Things applications. The research team at Cambridge University is led by Professor Arokia Nathan, a Malaysian who is the Director of Heterogenesys Laboratory in the Department of Engineering at Cambridge University.

CREST's talent development programmes at Universiti Teknologi Malaysia (UiTM), Universiti Malaysia Perlis (UniMAP) and Universiti Sains Malaysia (USM) continued to nurture undergraduate talent in 2014. More than 300 final year students have been trained on 14 industry relevant topics taught by more than 15 industry experts. The launch of The Great Lab (www.thegreatlab.com) in April 2014 is also expected to forge closer ties between industry and academia in Malaysia's E&E sector. The open innovation platform allows local and foreign Malaysian students to propose innovative solutions to real industry challenges. Shortlisted and winning ideas are rewarded by



PHOTO Prof. Shuji Nakamura at the CREST Symposium 2014

industry placement at participating companies, where students will translate their winning ideas into real and workable solutions under the mentorship of the industry experts. To date, two Malaysians from Imperial and University College London have successfully pitched winning ideas to Motorola Solutions and Intel. CREST has conducted eight industry challenges and workshops involving more than 450 students to promote open innovation in solving real industry problems.

CREST's industry engagement initiatives are set to drive four key market verticals in the Internet of Things (IoT) – healthcare, transportation, smart cities and retail. Cluster development programmes for healthcare and transportation have started with Kontron and Motorola Solutions, with more than 50 other companies and universities actively participating and driving towards creating solutions and products. The agency also opened the doors to CREST Place in Pulau Pinang in 2014 as an innovation hub for companies and individuals. Focusing on the fields of LED, embedded systems and IoT and IC design, CREST Place allows entrepreneurs to grow their businesses or test out their business ideas. CREST is working with industry players like Cisco, Dell, IBM, Intel and Kontron to jointly set up the IoT Lab and Cloud data centre in CREST Place.

Multimedia Development Corporation (MDeC)



A total of 230 companies were granted MSC Status by the Multimedia Development Corporation (MDeC) in 2014 with approved investments amounting to RM3.0 billion. Domestic investments accounted for just over half of this total (RM1.7 billion), while foreign investments made up the rest (RM1.3 billion). A total of 14,480 jobs are expected to be created by these projects. In 2013, a total of 236 companies with approved investments amounting to RM3.0 billion were awarded MSC Status. As of December 2014, there are a total of 3,632 MSC Malaysia status companies in Malaysia, 75 per cent of which are active (2,708 companies).

MDeC is the lead agency responsible for the development of the ICT industry and the digital economy in Malaysia. The country's digital economy showed marked advancement in the first half of 2014, with the ICT sector contributing RM161.6 billion to the nation's 2013 GDP of RM986.7 billion. In October 2014, the government unveiled two new initiatives to be led by MDeC that will further extend benefits of the national digital economy to the Bottom 40 per cent of the income pyramid (B40).

The first initiative will enhance the standard of living of the B40 community by accelerating existing efforts under Digital Malaysia to help the poor earn new income via crowdsourcing. This initiative will be rolled out across multiple Digital Work Centres and repurposed telecentres to impact rural and urban low-income households. The second initiative (Digital Government Transformation) will spur public sector excellence through online service delivery, telecommunications infrastructure and human capital development.

Beyond this, MDeC will drive the development and promotion of key technology hubs for data traffic. A global data traffic hub will be created by leveraging the data centre ecosystem in Cyberjaya, the international data connectivity gateways and creating a new cloud content and services cluster in the Iskandar region. MDeC will also position Malaysia at the forefront of creative multimedia content through the introduction of Content Malaysia, a one-stop



centre to spur the proliferation of all types of creative content in the country. Content Malaysia will enable content creators and industry players to exchange ideas, pitch for funding and take their ideas to market.

Other initiatives are aimed at driving Malaysia to become a regional games and interactive media hub and making Big Data Analytics (BDA) a priority area for the 11th Malaysian Plan (RMK 11). MDeC will drive three high-impact BDA projects, including setting up the Asian Institute of Data Science in collaboration with leading global universities, providing access to Government Open Data through data.gov.my and establishing a BDA Innovation Centre of Excellence that will be led by the private sector.

Halal Development Corporation (HDC)



With its vast experience and expertise in halal products and services, Malaysia is uniquely positioned to support global initiatives to enhance the halal industry. The Halal Industry Development

Corporation (HDC) coordinates the overall development of the national halal industry in its mission to realise Malaysia's vision of becoming the Global Halal Hub. To date, a total of 21 Halal Parks have been developed throughout the country, including 13 Halal Parks which have been awarded HALMAS status and which offer

No.	HALMAS Halal Parks	No. of Projects	Total Employment	Approved Investments (RMmil.)
1	Selangor Halal Hub	20	1,339	1,805.85
2	PKFZ Halal Flagship Zone	8	228	561.77
3	Melaka Halal Park	43	301	114.85
4	techpark@enstek	23	1,761	2,638.96
5	Tanjung Manis Halal Food Park	6	245	1802.5
6	Pedas Halal Park	3	120	20
7	POIC Tanjung Langsat Halal Park	7	330	1,125
8	Penang International Halal Park	8	1,069	381.08
9	POIC Lahad Datu Halal Park	N/A	N/A	N/A
10	ECER Pasir Mas Halal Park	N/A	N/A	N/A
11	ECER Gambang Halal Park	N/A	N/A	N/A
12	PERDA Halal Park	N/A	80	N/A
13	Sedenak Industrial Park	N/A	N/A	N/A
	TOTAL	118	5,473	8,450.01

TABLE Investments approved and employment in HALMAS Halal Parks, 2009 - 2014

halal industry players investing within these dedicated parks to enjoy attractive tax incentives and duty exemptions.

As of December 2014, HALMAS Halal Parks have attracted RM8.45 billion in investments. This includes investments from USA, Australia and Japan. A total of 118 projects are in operation, providing employment for more than 5,000 workers. Among the projects approved were multinationals and SMEs producing halal processed food, halal ingredients and halal pharmaceuticals.

BioTechCorp



Malaysia is in the final year of the Science to Business phase in the National Biotechnology Policy and is making the transition into the Global Business phase. This phase will focus on consolidating the strengths and capabilities

of Malaysian companies in the discovery and development of new bio-based products and create global brands for Malaysia's biotech companies and its products. It envisions Malaysia as a highly competitive nation that derives great value from R&D activities and innovations, where commercial enterprises assume technology leadership and accelerate

revenue generation, profitability and sustainable growth.

BiotechCorp has successfully built a network of 248 BioNexus status companies to date accounting for about RM4.6 billion in approved investments in the BioMedical, AgBiotech and BioIndustrial sectors. A total of 20 new companies were awarded the BioNexus Status in 2014. Realised private investments (as reported by BioNexus companies) between January and September 2014 amounted to RM242 million. The AgBiotech sub-sector attracted the most investments (RM195 million), followed by the BioMedical (RM38 million) and BioIndustrial (RM9.0 million) sub-sectors.

Three projects worth nearly RM1.0 billion in domestic direct investments were approved in 2014, one of which is a RM720 million plant to produce humic acid-rich organic fertiliser from palm oil waste. The bio-fertiliser additive increases the soil absorption rate for organic nutrients, improves the quality and yield of agricultural products and effectively reverses the impact of conventional chemical fertilisers. There was also a RM152 million project driven by a domestic investor to develop halal meningococcal vaccines and other halal biopharmaceuticals. A significant investment of RM125 million was also approved for commercialising standardised high value

agarwood (gaharu) essential oils for the nutraceuticals and cosmeceuticals industries.

TalentCorp

TalentCorp MALAYSIA One of the most important agencies that MIDA works with is TalentCorp

Malaysia, which has been tasked with ensuring that the country has the talent pool it needs to achieve its economic objectives.

TalentCorp helps optimise the way graduates are employed and encourages Malaysians abroad to bring their expertise home through initiatives like the Returning Expert Programme (REP). In April 2014, the agency revised its REP criteria to better align with the economy's needs while ensuring transparency and accountability in offering tax incentives to top talent. Despite the higher eligibility requirements, over 600 potential returnees had their applications approved in 2014. TalentCorp also unveiled its new Global Malaysians online job board in 2014 to connect skilled Malaysians abroad with domestic employers.

TalentCorp is also doing its best to bridge critical skill gaps by attracting top foreign talent to Malaysian shores through its Residence Pass - Talent (RP-T) programme, which enables foreigners to work in Malaysia for up to 10 years. Since its introduction in April 2011, the programme has approved over 3,000 applications, more than 1,000 of which were approved in 2014 alone in priority economic sectors like business services, oil and gas exploration (OGE), communications, content and infrastructure (CCI), education and financial services. TalentCorp's new Expatriate Services Division (ESD) will help accelerate the country's efforts to bridge critical skill gaps by providing expatriates and companies a single channel for submitting all expatriate-related immigration matters. Companies that have registered with the ESD will have their work permit applications processed for approval within five working days.

One of TalentCorp's key functions is to nurture an environment in which local talent can develop and flourish. To this end, the agency is working closely with the Ministry of Education (MoE) on the Structured Internship Programme (SIP) to give undergraduates valuable work experience. Over 12,000 interns joined SIP-

"Despite the higher eligibility requirements, over 600 potential returnees had their [Returning Expert Programme] applications approved in 2014."

endorsed companies in 2014, all of which enjoy double deduction tax incentives under the Government's 2015 Budget. TalentCorp also runs the Scholarship Talent Attraction and Retention (STAR) initiative in cooperation with the Public Service Department (JPA) to help Government-funded graduate scholars serve their bond of service at leading investor companies in Malaysia. The programme found placements for 800 scholars in 2014, double the number in 2013. Moving forward, the STAR programme will be complemented by the JPA Management Apprenticeship Programme (MAP), which was launched in October 2014. MAP lets graduate JPA scholars serve three months in a structured apprenticeship with select private sector employers and statutory bodies, giving them valuable experience in a real-world professional environment while ensuring that employers will have a continuous pipeline of talent.

Working in collaboration with the Ministry of Women, Family and Community Development





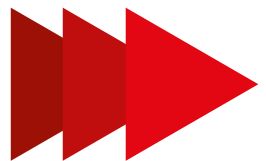
(KPWKM), TalentCorp also launched the flexWorkLife.my portal in 2014 to help people find flexible, family-friendly work solutions. Even better, through their Women Career Comeback programme, the Government began providing a tax deduction for companies willing to introduce flexible work arrangements. This is in addition to Government grants for bringing back more professional women on a career break.

The Government has allocated RM30 million for TalentCorp to launch an Industry Academia Collaboration programme under the 2015 Budget. This programme will bring together universities, Government entities and industries to develop industry-relevant short courses and industrial training. This new initiative is expected to further strengthen the country's talent base and encourage more public-private partnerships within high-growth economic areas.

MALAYSIA: EPICENTRE OF ASEAN



*Despite falling commodity prices
and economic instability, Malaysia
and ASEAN continue to attract the
interest of foreign investors.*



• • • • •



A subsidiary of Germany's largest semiconductor manufacturer, Infineon is expanding its Malaysian facility and R&D capabilities. It is also collaborating with local universities on talent development programmes.

PRELIMINARY DATA FROM THE UNITED NATIONS Conference on Trade and Development (UNCTAD) estimates that global foreign direct investment (FDI) flows declined by eight per cent in 2014 to USD1.26 trillion due to global economic fragility, policy uncertainty and geopolitical risks¹. This is in stark contrast with the global investment climate 2013, when FDI inflows increased by nine per cent worldwide and across all major economic groupings –

¹ UNCTAD, *Global Investment Trends Monitor No. 18*.

developed, transition and developing. Instead, FDI inflows to developed countries dropped by 14 per cent to an estimated USD511 billion in 2014, while flows to transition economies more than halved to USD45 billion.

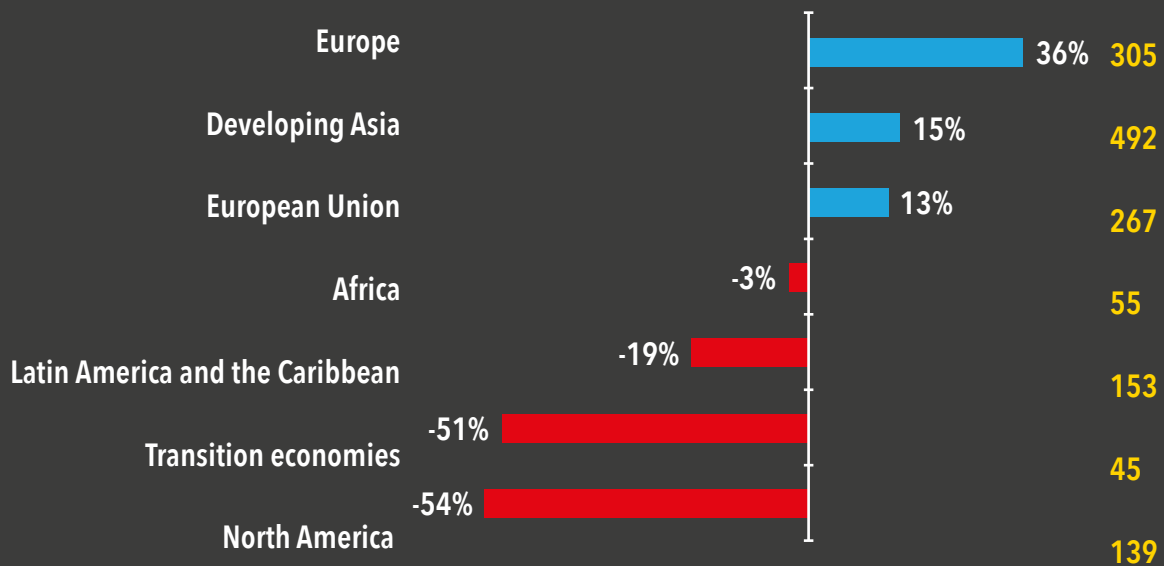
The good news is that most developing economies saw their FDI inflows rise by four per cent to hit a new high of USD700 billion in 2014, suggesting that investors are still bullish about the prospects of growth in developing parts of the world. Indeed, developing economies accounted for 56 per cent of total global FDI inflows in 2014, with developing Asia leading the way. Preliminary data suggests that combined FDI inflows to 40 economies in Asia grew by an estimated 15 per cent to a historical high of USD492 billion, with China becoming the world's largest recipient of FDI (USD128 billion). FDI inflows to India also surged by 26 per cent to an estimated USD35 billion.

FDI inflows to Hong Kong rose by an astonishing 46 per cent in 2014 to an estimated USD111 billion, although much of this growth was driven by CITIC group's USD42 billion consolidation deal. However, FDI flows to West Asia are believed to have declined for the sixth consecutive year in 2014 due to the unrest in the Middle East.

Instability in the Middle East also affected FDI inflows to North Africa, which saw a 17 per cent decrease of FDI because of the civil unrest in Libya. Most other African sub-regions saw similar FDI inflows to 2013. FDI flows to Latin America also fell sharply in 2014, decreasing by 19 per cent to USD153 billion, mainly because of a 26 per cent decline in cross-border M&As and of reduced investment in extractive industries due to lower commodity prices. FDI flows to the Russian Federation are estimated to have declined by 70 per cent to USD19 billion in 2014, while FDI flows into Ukraine contracted to -USD0.2 billion. Most oil and gas companies based in developed countries have cancelled or withheld investments into the region, although FDI flows into neighbouring countries such as Kazakhstan and Azerbaijan rose.

The European Union proved to be surprisingly resilient in the face of fiscal and political uncertainty. FDI flows into the region rose by 13 per cent to an estimated USD267 billion in 2014, with notable spikes in Portugal and Sweden. The United Kingdom saw its inflows

ESTIMATED FDI INFLOWS BY REGION, 2013-2014 (% change and value of inflows in USD billions)



Source: UNCTAD. Latin America and the Caribbean excludes Caribbean offshore financial centres

rise to an estimated USD61 billion, as did the Netherlands (USD42 billion) and Luxembourg (USD36 billion). However, inflows into Germany and France contracted to -USD2.1 billion and -USD6.9 billion respectively. Lower intra-company loans by EU investors also diminished FDI flows to Ireland to just USD10 billion. A sharp fall in intra-company loans also caused a dip in FDI into Canada, where inflows declined by 26 per cent to USD53 billion.

As a relatively open economy, Malaysia faced similar challenges with declining FDI inflows in 2014. Approved foreign investments in both the primary and services sectors decreased to RM7.3 billion (2013: 9.9 billion) and RM17.7 billion (2013: 19.0 billion) respectively. However, foreign investments into approved projects within the manufacturing sector surged by 29.7 per cent to RM39.6 billion from RM30.5 billion in 2013. Many of these approved foreign investments are in high value-added activities that promise to raise the country's economic profile as a destination for high-quality investments.

THE BRIGHT SPOT IN ASEAN

The outlook for global FDI in 2015 is uncertain. Volatile exchange rates may hinder investors from making big investment decisions,

and rock-bottom commodity and oil prices will discourage investments into extractive industries. The unpleasant experiences brought about by the geopolitical uncertainty in the Middle East and Eastern Europe have also made businesses more cautious about making bold moves into new markets, although bright spots of promising growth may still be found in Asia and the ASEAN region in particular.

ASEAN's international trade has almost tripled over the last decade. It is headquarters to 74 of the Forbes Global 2000 companies. At least 277 of the corporations based in the region have revenues exceeding USD1.0 billion. This demonstrates that the region has the necessary talent, infrastructure and policies that global businesses need to succeed in a global economy. It also means that ASEAN represents a global market of buyers in itself – Bank of America Merrill Lynch estimates that the region accounts for about 38 per cent of Asia's initial public offerings.

One of ASEAN's greatest strengths is its diversified manufacturing and export base, with member states apparently specialising in specific industries that offer investors strong ecosystems on which they can leverage. While Malaysia and Singapore are clearly the leaders in electronics and advanced technology



industries, Vietnam specialises in textiles and garments. Thailand is one of the world's leading automotive exporters. The region is also monetising its natural resources, being among the world's largest exporters of commodities such as palm oil, coal, tin and cocoa.

Yet ASEAN is not a homogenous market. There are wide disparities among ASEAN state members in terms of purchasing power, economic maturity and culture. Indonesia is responsible for almost 40 per cent of ASEAN's overall economic output, while Myanmar is still very much an emerging market struggling with the usual teething problems that accompany any country's effort to interate into the world economy. GDP per capita in Singapore is among the highest in the world, whereas GDP per capita in Laos and Cambodia is among the lowest. Investors into ASEAN cannot rely on a blanket strategy to tap into the ASEAN market, but must approach each market separately.

With that said, ASEAN has earned itself a track record for economic stability that is the envy of the world. Government debt in ASEAN is under 50 per cent of GDP, far lower than developed economies such as the UK or the US. Economic growth has also been much steadier in ASEAN than the rest of the world over the past decade. ASEAN's cities are home to 22 per cent of the

region's population and account for more than 54 per cent of its GDP. ASEANites are also very internet-savvy – it is the world's second-largest community of Facebook users. There is immense room for future growth, and investors are jostling for market positions ahead of the boom.

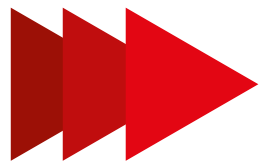
The AEC will remove barriers to the movement of goods, services, capital and people throughout ASEAN. If this integration strategy is fully implemented, the McKinsey Global Institute (MGI) estimates that ASEAN countries could gain USD280-625 billion in annual GDP by 2030. If ASEAN members continue to remain united through this difficult period in world history, the region will continue to be one of the world's most attractive investment destinations. With ASEAN + 3, the region can also act as an important counterbalance to the instability in the Middle East and commodity-dependent economies in Africa and Latin America and offer businesses a platform to tap into the markets of greater Asia.

As the chair of ASEAN for 2015, Malaysia has the opportunity to play a bigger role in promoting the region's political stability, biodiversity and human capital to the world. The time to assume leadership for the region's economic future has come.

MANUFACTURING DONE RIGHT



*Led by capital-intensive investments in
flagship industries, the manufacturing sector
is on course for a healthy transformation.*



• • • • •



Technical personnel at Alliance Contract Manufacturing giving the thumbs up after the company modernised its facilities to optimise its wafer processing equipment. The Penang-based company provides total manufacturing solutions for a wide range of industries.

MALAYSIA'S MANUFACTURING SECTOR CONTINUED to draw a healthy share of investments in 2014 as major manufacturers consolidated their position in the region ahead of the ASEAN Economic Community deadline. About RM71.9 billion worth of investments were approved for 811 projects in 2014, about 38 per cent more than the total investments approved for 2013 (RM52.1 billion). More than half of these investments (55.1% or RM39.6 billion) came from foreign investors, while

the rest (RM32.3 billion) came from domestic sources.

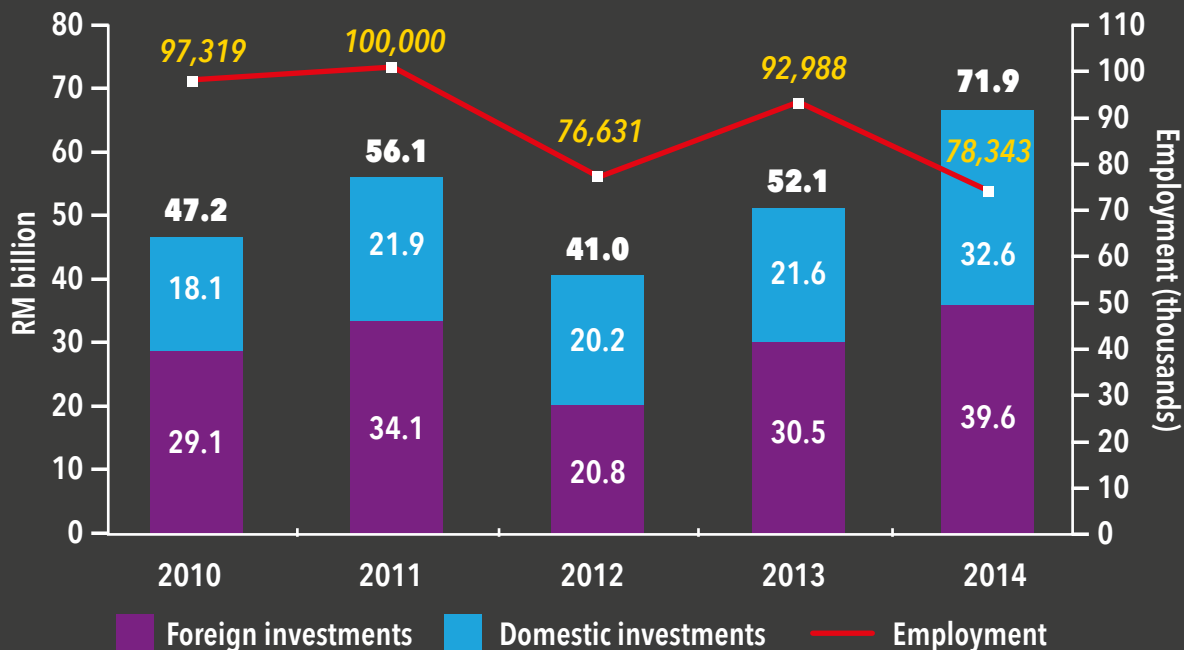
Amid the risks and uncertainties of the global economic environment, investors remain confident about Malaysia as a destination for foreign investment. The investments approved in 2014 continue to surpass the average annual investment target of RM27.5 billion set under the Third Industrial Master Plan (IMP3). Greenfield projects account for 60.5 per cent of the total manufacturing projects approved with investments of RM43.5 billion (450 projects), highlighting Malaysia's continued pre-eminence as a location of choice for high value-added manufacturing activities. Of this total, RM19.5 billion (44.9%) came from foreign sources while RM23.9 billion (55.1%) were domestic investments. Existing companies in Malaysia also continued to expand and diversify their operations, reflecting their prevailing confidence in the country's investment environment. A total of 361 expansion/diversification projects with investments amounting to RM28.4 billion were approved in 2014, accounting for 39.5 per cent of the total investments approved.

The projects approved in 2014 are expected to create employment opportunities for 78,343 people. Of these, 17,635 (22.5%) are in managerial, technical and supervisory roles, while 48,468 (61.9%) are skilled workers. Only 12,240 (15.6%) of the jobs created are for unskilled workers, sales, clerical and other roles.

Most of the employment opportunities created are in the E&E sub-sector (16,700 jobs), followed by the basic metal products (7,133) and transport equipment (6,873) sub-sectors. The Government also continues to grant approvals for expatriate posts, particularly for managerial and technical roles in Malaysian as well as foreign-owned companies. A total of 1,339 expatriate posts were approved in 2014, of which 174 were key posts that could be permanently filled by foreigners. The remaining 1,165 were term posts, generally granted for three to five years where Malaysians are trained to eventually take over the posts.

A large number of projects were approved to be located in Selangor (229 projects), Johor (179 projects) and Pulau Pinang (169 projects), which continued to be the leading states in terms of number of projects approved. A total

INVESTMENTS AND EMPLOYMENT IN PROJECTS APPROVED WITHIN THE MANUFACTURING SECTOR, 2010-2014 (Number of jobs and value of investments)



of 577 (71.1%) of the projects approved will be located in these three states. In terms of value, the state of Johor (RM21.2 billion) received the largest amount of investments, followed by Sarawak (RM9.6 billion), Pulau Pinang (RM8.2 billion), Selangor (RM7.0 billion) and Kedah (RM5.3 billion). These 5 states contributed 71.3 per cent of the total investments approved in 2014.

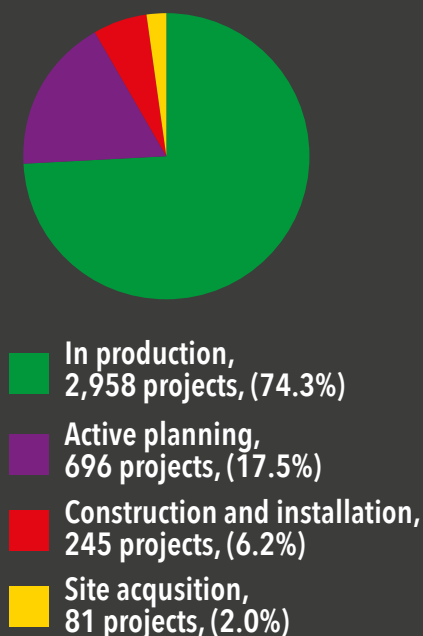
The investments in Johor were largely due to the Pengerang Integrated Complex megaproject, which attracted RM14.8 billion in four projects to manufacture a wide range of petrochemicals. Investments in Sarawak were dominated by the RM5.1 billion expansion of a foreign-owned project to manufacture various chemicals as well as RM3.9 billion of investments into the basic metals industry. The state of Pulau Pinang continued to draw projects within the E&E (RM4.8 billion), machinery and equipment (RM1.4 billion) and basic metal products (RM300 million) industries, with investments amounting to RM8.2 billion in total.

The new projects in 2014 bring the total number of manufacturing projects approved during the five-year period of 2010 to 2014 to 4,158

projects. Around 3,203 of these projects have been implemented thus far, with 2,958 projects in production and 245 projects still undergoing factory construction and machinery installation. Total capital investment in these 3,203 projects amounted to RM172.9 billion. Another 81 projects with investments of RM30.6 billion have already acquired sites for factories, while 696 other projects worth RM50.3 billion are in the active planning stage. When these 777 other projects are realised, total investment of these projects will amount to RM80.9 billion.

The majority of projects implemented during the five-year period of 2010 to 2014 covered major industries such as electrical and electronics (E&E), machinery and equipment (M&E), transport equipment, chemicals and chemical products and fabricated metal products. Selangor has the largest number of implemented projects to date, followed by Johor, Pulau Pinang, Perak, Kedah and Negeri Sembilan. In 2014, a total of 19 companies were forced to downsize their operations and retrench 1,023 workers. Five companies had to cease operations altogether. The reasons cited for these closures were poor market conditions, increasing costs, financial problems and

IMPLEMENTATION OF APPROVED MANUFACTURING PROJECTS, 2010 - 2014



restructuring issues. Nonetheless, these closures were more than offset by the creation of 40,549 new job opportunities during the same period as 454 new projects commenced production.

CAPITAL INTENSITY OF MANUFACTURING PROJECTS

The capital-intensity (as measured by capital investment per employee, CIPE) of projects approved in the manufacturing sector in 2014 was RM917,155. The industry with the highest CIPE ratio was petroleum products including petrochemicals (RM10,108,693) followed by the chemical & chemical products industry (RM2,283,023) and basic metal products industry (RM1,394,081). A total of 15 projects with investments of at least RM1.0 billion or more were approved in the manufacturing sector with total investments of RM40.4 billion and contributing 56.2 per cent of total investments approved. These 15 projects were in the petroleum products including petrochemicals industry (four projects with RM14.8 billion), basic metal products (three projects with RM7.6 billion), chemicals and chemical products (two projects with RM6.7

billion), electrical and electronic (three projects with RM6.0 billion), transport equipment (one project with RM3 billion), non-metallic mineral products (one project with RM3.0 billion) and machinery and equipment (one project with RM1.1 billion). In comparison, there were 14 projects which recorded investments of at least RM1 billion or more in 2013 with total investments amounting to RM24.8 billion.

In 2014, there were 72 projects approved in the manufacturing sector which recorded investments of at least RM100 million or more. Total investments in these projects amounted to RM19.7 billion, or 27.4 per cent of the total investments approved.

OWNERSHIP OF MANUFACTURING PROJECTS

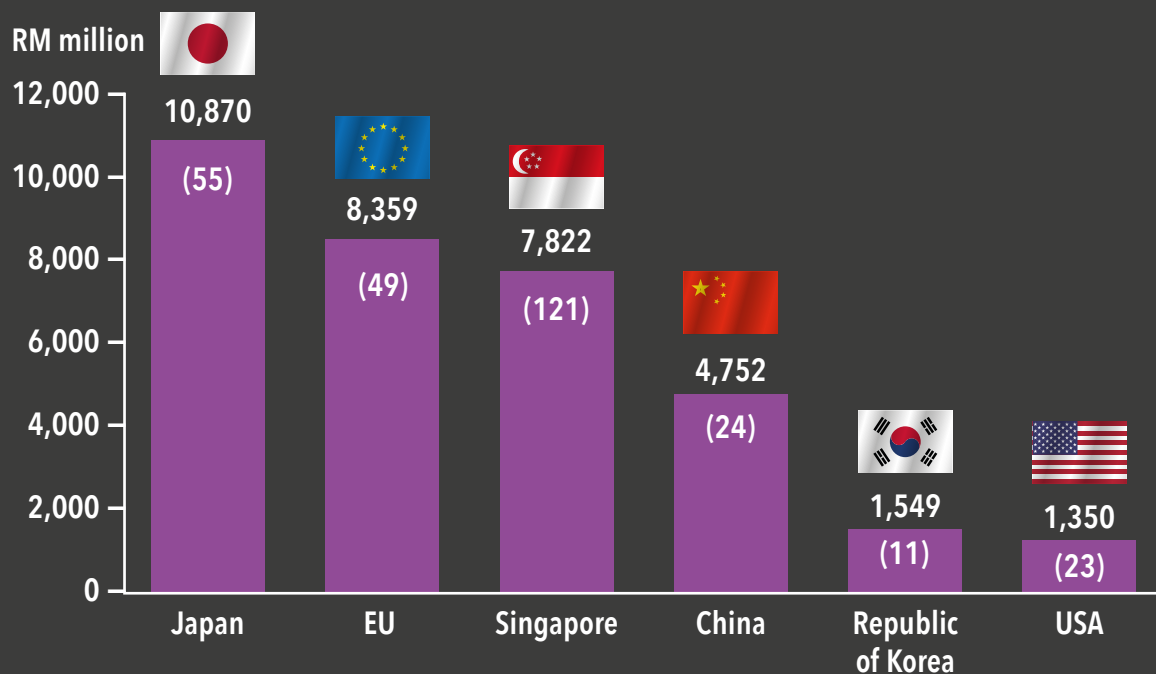
With competition for global FDI increasing rapidly, it is critical that domestic investors assume a more important role in driving Malaysia's investment agenda and reshaping the economy. The country's continued competitiveness is now dependent on strengthening the manufacturing and services sectors and accelerating the shift to high value-added, high technology, knowledge-intensive and innovation-based industries. This transformation will not take place without the strong participation of domestic investors.

Approved domestic investments into the manufacturing sector surged to RM32.3 billion from RM21.6 billion in 2013, accounting for 44.9 per cent of total investments approved. Most (RM23.9 billion) of these investments were in new projects, while RM8.3 billion were in expansion/diversification projects. The industry that attracted the most interest from domestic investors was the petroleum products including petrochemicals industry (RM11.3 billion or 35%) followed by transport equipment (RM3.7 billion), chemicals and chemical products (RM3.0 billion), non-metallic mineral products (RM2.1 billion), and basic metal products (RM2.0 billion).

Nonetheless, Malaysia continued to attract encouraging levels of foreign investments in the manufacturing sector despite the global economic slowdown. It jumped a remarkable 10 places to become the 15th most attractive destination for FDI in the A.T. Kearney Foreign Direct Investment Confidence Index. Foreign

MAJOR SOURCES OF FDI IN APPROVED MANUFACTURING PROJECTS, 2014

(RM millions, with number of projects in parentheses)



investments in approved manufacturing projects amounted to RM39.6 billion in 2014, of which RM19.5 billion (49.2%) was for new projects while the remaining RM20.1 billion (50.8%) was in expansion/diversification projects. The E&E sector attracted the largest amount of foreign investments (RM10.4 billion), largely due to two projects with investments of RM4.6 billion for the manufacture of wafer fabrication and printed circuit boards. Other industries with high levels of foreign investments were the basic metal products industry (RM8.0 billion), chemicals and chemical products (RM7.7 billion), petroleum products including petrochemicals (RM4.7 billion) and transport equipment (RM1.9 billion).

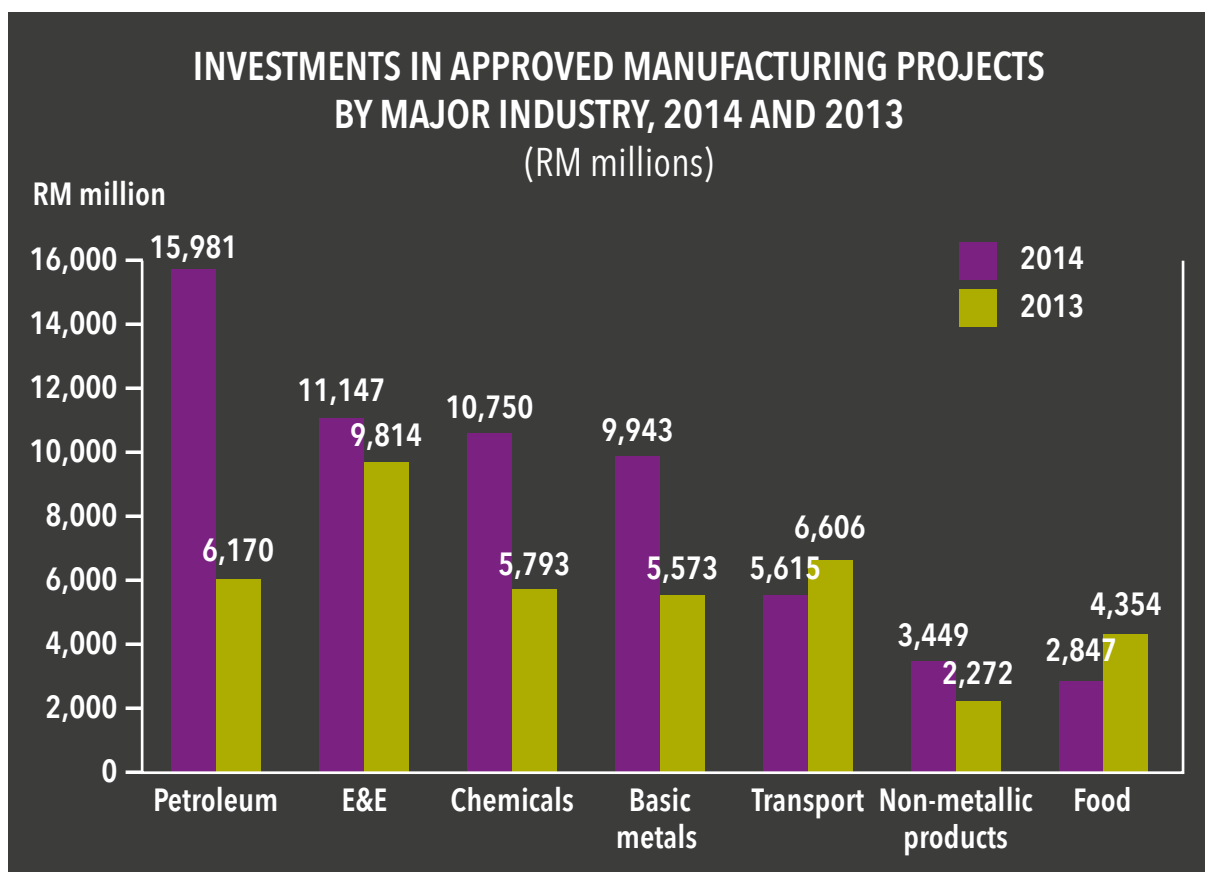
Japan was the manufacturing sector's biggest foreign investor in 2014 (RM10.9 billion in 55 projects), followed by the European Union (RM8.4 billion in 35 projects), Singapore (RM7.8 billion each in 121 projects), China (RM4.8 billion in 24 projects), the Republic of Korea (RM1.6 billion in 11 projects) and the USA (RM1.4 billion in 23 projects). These six territories jointly accounted for 86.6 per cent of total foreign investments approved within

the manufacturing sector in 2014. Investments from Germany increased significantly with a new RM3.2 billion project involving the manufacture of wafer fabrication and another project that will produce insulation material with investments of RM634.2 million.

It is worth noting that most of the foreign projects approved involve high technology, high value-added goods that best characterise Malaysia's industrial ambitions. China made significant investments in two projects within the steel industry in 2014 with investments of RM4.2 billion and RM213.8 million. In addition, the investments from Japan, Singapore, Germany and the Republic of Korea include several high value chemical and petrochemical projects as well as projects to manufacture wing-in-ground (WIG) craft and engines and engine components for energy efficient vehicles (EEVs).

MANUFACTURING PROJECTS APPROVED IN 2014

The petroleum products including petrochemicals sub-sector recorded the highest investments approved in 2014 (RM16.0



billion), although this was mostly due to the much-anticipated Pengerang Integrated Complex megaproject. This was followed by E&E (RM11.1 billion), chemicals and chemical products (RM10.8 billion), basic metal products (RM9.9 billion), transport equipment (RM5.6 billion), non-metallic mineral products (RM3.4 billion), food manufacturing (RM2.8 billion), and machinery & equipment (RM2.5 billion). These eight industries accounted for RM62.1 billion or 86.4 per cent of total investments approved.

Malaysia's favourable investment climate makes it an attractive investment location for serving global and regional markets. In 2014, a total of 286 export-oriented projects were approved that propose to export at least 80 per cent of their output. The projects involve investments of RM31.9 billion, of which foreign investments amounted to RM19.6 billion (61.4%) while domestic investments made up the rest (RM12.3 billion or 38.6%). The main industries with export-oriented projects were E&E products (RM10.0 billion in 58 projects), basic metal products (RM4.1 billion in 5 projects) and chemicals and chemical products (RM3.8 billion in 26 projects).

Electrical & electronic products

The high degree of expansions among existing E&E companies in Malaysia reflects the prevailing confidence of foreign companies in the country's investment climate. A total of RM11.1 billion was invested into 96 approved projects in the E&E industry in 2014. About RM2.4 billion of this total went into 29 new approved projects, while RM8.7 billion was invested into 67 expansion and diversification projects.

Most (93.7% or RM10.4 billion) of the investments came from foreign sources, mainly from Germany, Japan and the USA. Domestic investments accounted for 6.3 per cent (RM700 million) of the year's total approved investments. The investments from Germany were mainly in the electronic components sub-sector, while investments from Japan were focused exclusively on the electronic components sub-sector. Investments from the USA were mainly in the electronic components and industrial electronic sub-sectors.

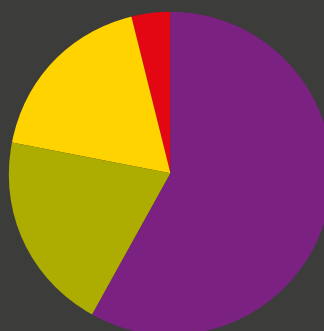
Malaysia's Electrical & Electronic (E&E) industry is focused on deepening and strengthening the three major ecosystems of Semiconductor, Solar and Light Emitting Diode (LED) technologies. The country continues to elevate the E&E industry into relatively youthful, higher-end activities, pushing into high value-added manufacturing processes and knowledge industries. While MNCs continue to expand their R&D capabilities in Malaysia, local companies are developing their own competencies in research, design and development to support the activities of these MNCs. Exports of E&E products amounted to RM256.1 billion in 2014, making up 43.6 per cent of the country's total manufactured exports during the period.

A key catalyst in this shift towards higher value manufacturing is the growing market opportunities presented by the Internet of Things (IoT). In the IoT world, any 'thing' can be digitised and connected to the internet, thereby enabling networks between electronic machinery and humans. According to Cisco Systems, as many as 50 billion 'things' could be connected to the internet by 2020, double the amount that is connected today. As new technologies such as data lakes emerge, the ability to capture and process the data generated from these things will become a reality.

The traditional usage of embedded systems, wireless sensor networks, control systems, automation (including home and building automation) and such others will be revolutionised to enable IoT. The E&E industry will be an IoT enabler for industry clusters such as healthcare, automation, transportation, logistics, security, smart cities and tourism. Malaysia's E&E industry can benefit from adopting smart concepts in manufacturing processes such as embedded systems driven by IoT. Sensors and MEMs play a major role in the creation of IoT, and domestic innovators such as Globetronics and Silterra will benefit tremendously from their advanced technology and research as the market for IoT grows. Government initiatives have also encouraged IC design firms such as PixArt Imaging, Effinex, Altera, Phisontech and Symmid to invest into new projects in Malaysia.

The government has also successfully positioned Malaysia as a global hub for the photovoltaic (PV) manufacturing industry and

APPROVED INVESTMENTS IN THE ELECTRICAL & ELECTRONIC INDUSTRY BY SUB-SECTOR, 2014



Electronic components, RM5.8 bil. (52.4%)

Industrial electronics, RM3.1 bil. (28%)

Electrical products, RM1.8 bil. (16.2%)

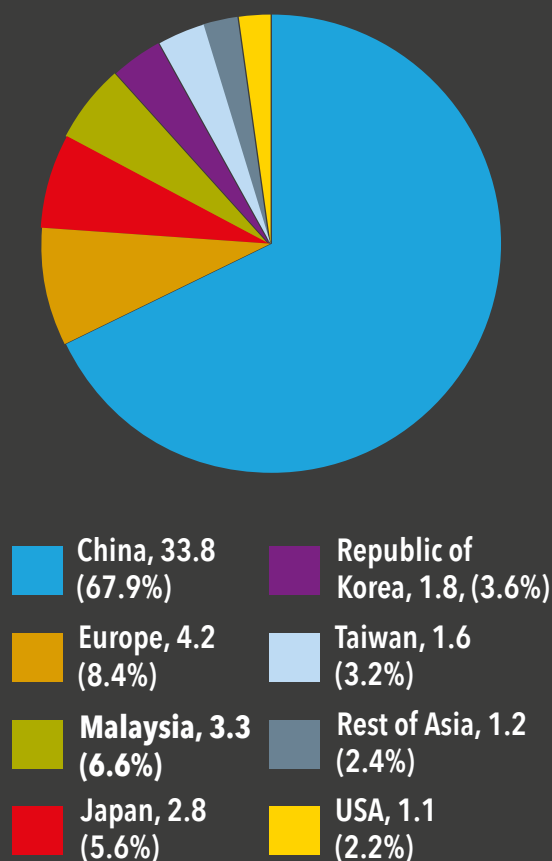
Consumer electronics, RM375 mil. (3.4%)

TOTAL:
RM 11.1 BILLION

has attracted some of the world's biggest names in solar photovoltaics to invest in Malaysia. The introduction of the Feed-In-Tariff scheme and financing mechanisms such as Green Technology Financing Scheme (GTFS) have significantly spurred growth within the solar industry. Recent projects from AUO Crystal (wafers), AUO - Sunpower (cells), Hanwha Q-Cells Malaysia (cells), First Solar Malaysia (thin-film and monocrystalline solar modules) and Panasonic Energy Malaysia are now all in production and have helped make Malaysia the world's third-largest producer of solar equipment.

Another focus area for Malaysia's E&E industry is light emitting diodes (LEDs). The Government phased out the sale of incandescent bulbs in 2014 and is encouraging consumers to use energy efficient lights such as compact

WORLD'S LEADING PRODUCERS OF SOLAR MODULES, EST. 2013 (GW)



Source: GTM Research

fluorescent lights (CFL), T5 tube light and LED lights. OSRAM has taken the lead in setting up a wafer fabrication plant for producing LED chips, while assembly and testing activities will be carried out by other MNCs such as Nichia, Philips Lumileds, Rohm Wako and OSRAM itself. Globetronics and Dominant Opto are among the Malaysian companies that are participating in this cluster. Malaysian exports of lamps, lighting fittings and parts grew by 35.40 per cent in 2013 to Euro 101.381 million¹.

The electronic components sub-sector was the largest sub-sector in terms of the number of investments approved in 2014, with 23 projects amounting to RM5.8 billion. Foreign investments amounted to RM5.5

¹ MATRADE, "Bright Prospect for Exports of Lamps, Lighting, Fitting and Parts"

billion (94.8%) of this total, while domestic investments came up to RM341.6 million (5.2%). A total of four applications involving RM101.6 million were for greenfield projects, while 19 applications (RM5.7 billion) were for expansion/diversification projects. The projects are expected to generate employment opportunities for 6,407 people.

The electronic components sub-sector has undergone a structural change in recent years, with companies shifting their focus to front-end processes that require more advanced research, design and development activities. This provides opportunities for local engineers engage in new product development and leading edge technologies. Semiconductor devices also continue to be the leading export for the E&E industry, with major MNCs such as Intel, AMD, On Semiconductor, San Disk, Amkor, Freescale Semiconductor, ASE, Infineon, STMicroelectronics, Texas Instruments, Fuji Electric Semiconductor, Rohm Wako and Renesas all contributing to the steady growth of the industry. Malaysian-owned companies such as Silterra, Carsem, Globetronics, Unisem and Inari have benefitted significantly from the expertise of these foreign companies.

The projects approved in this sub-sector in 2014 were mainly for the production of electronic components such as semiconductor devices, Printed Circuit Board (PCB) and optoelectronics devices. The biggest investment (RM3.2 billion) was an expansion project by a wholly foreign-owned company into a wafer fabrication plant. Another expansion project by a wholly foreign-owned company with investments of RM1.5 billion will manufacture printed circuit boards. These massive projects are expected to generate around 2,963 jobs.

The E&E's second-largest sub-sector is electrical products, drawing RM1.8 billion in 38 approved projects in 2014, with 13 new projects and 25 expansions or diversifications. Most (88.9%) of these projects came from foreign sources (RM1.6 billion), while domestic sources accounted for the rest (RM245 million). The projects are expected to create 4,482 jobs.

A further 21 projects were approved within the industrial electronics sub-sector in 2014, backed by RM3.1 billion in investments. A total of 11 of these were diversification/expansion projects worth RM1.0 billion in investments, while the

ELECTRIC YOUTH

Malaysia's E&E industry is moving rapidly up the value chain in emerging technologies

Arguably the backbone of Malaysian manufacturing and export, the country's E&E industry is an important part of Malaysia's long-term economic growth strategy, particularly within the three major ecosystems of semiconductor, solar and light emitting diode (LED) technologies. All three industries have very bright growth prospects driven by fundamental shifts in energy consumption patterns and consumer behaviour, with Gartner expecting worldwide semiconductor sales to hit USD358 billion in 2015 as innovations for application-specific standard products (ASSPs) in smartphones, solid-state drives (SSDs) and ultramobiles continue to build the "Internet of Things" (IoT).

Malaysia sees the IoT as the E&E industry's next big thing. Although the country had a notable share of global exports of office and computer equipment during their heyday, most of its value-add was in downstream packaging and assembly. In the IoT era, the country intends to play a much larger role in the upstream segment by becoming a hub for R&D and custom manufacturing – it has developed an industrial base across the entire semiconductor value chain over the last 40 years, and leveraging this industrial base will be an important part of its growth strategy. Intel, Motorola, Agilent, Altera, Infineon, National Instrument, Spansion and Sony are just some of the companies that have upgraded their facilities into integrated manufacturing centres which fuse manufacturing with R&D, product design and development, marketing and distribution activities. These companies recognise that the IoT era is still in its youth and that there is plenty of opportunity for early expansion.

The other youthful industries – solar and LED technologies – are being driven by changing patterns in energy consumption. Solar power systems offer consumers and businesses a renewable energy source that is becoming cheaper and more efficient with every passing year, while LEDs are increasingly

replacing fluorescent and incandescent technologies as the global lighting standard. Although Malaysia is still at the low-end of the value chain in both industries, it has all the right ingredients to move upstream very quickly – both industries will benefit from Malaysia's strengths in semiconductors, wafer fabrication and IC design, and the country is positioning itself to take advantage of next-generation developments such as LED 2.0 and concentrated photovoltaics.

According to GTM Research, worldwide solar adoption grew approximately 50-fold between 2003 and 2013, with growth in the next decade expected to be driven by demand in China. Newer solar-plus-storage systems will also boost demand for energy storage systems, which is another focus of Malaysia's long-term E&E strategy. Demand for solar is also supported by falling prices for LED lighting, which is vastly more energy efficient than other lighting and is therefore an ideal complementary technology for solar systems. The energy-consuming, LED-equipped devices of the IoT will provide both the solar and LED industries with steady demand for decades to come.

The means to expand these ecosystems already exist in Malaysia, in the form of good infrastructure, a solid E&E industrial base, a talented workforce and the inclination to improve and innovate. Design and Development (D&D) investments in the E&E sub-sector doubled from RM1.0 billion in 2007 to RM2.0 billion in 2012, while the number of D&D engineers has increased from 2,000 to 5,500. Educational institutions nationwide are also feeding the spirit of innovation with numerous idea competitions supported by established local E&E businesses and organisations like CREST, which is giving out RM100 million in grants over 10 years for E&E research projects. These investments into creative thinking, the IoT, green and smart objects will provide the country with the pipeline of talent and innovation it needs to power future growth.

other ten were new projects driven by RM2.1 billion in investments. Most of these investments came from foreign sources (RM3.1 billion) while the rest came from domestic investors (RM69.4 million). One very notable project is a RM842 million, wholly-foreign owned project that will produce data storage devices which use the latest in solid-state memory technology. This new project is expected to create 537 job opportunities.

The E&E's smallest sub-sector is consumer electronics. It drew RM375 million in 14 approved projects in 2014, all of which were expansion/diversification projects. The most significant of these projects was a foreign company's RM70 million expansion of their hearing aid manufacturing plant.

Transport equipment

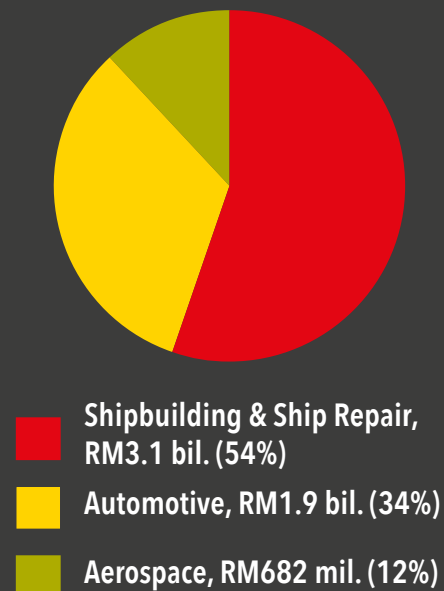
The transport equipment industry covers the automotive, aerospace, shipbuilding and ship repair (SBSR) sub-sectors. The year 2014 saw 56 projects being approved in this industry funded by RM5.6 billion in investments. Two thirds (3.7 billion) of these investments came from domestic sources, while foreign sources contributed the rest (RM1.9 billion). A total of 31 of these projects were new (RM4.8 billion), while 25 were expansion/diversification projects worth RM744.2 million. The projects are expected to generate 6,873 jobs.

In 2014, the transport equipment recorded a total of RM10.6 billion in exports. The bulk of these exports are of road vehicles (RM6.6 billion) with the rest coming from aircraft and associated parts and equipment (RM2.7 billion) and ships, boats and floating structures (RM1.0 billion). Exports of railway vehicles and associated equipment amounted to RM37.3 million.

Automotive

The automotive industry is one of Malaysia's biggest, with four National Projects and 10 assemblers within the motor vehicles sub-sector alone. According to the Malaysian Automotive Association (MAA), motor vehicle production for the year 2014 amounted to 596,418 units, comprising 545,122 passenger vehicles and 51,296 commercial vehicles. Exports by this sub-sector amounted to RM6.6 billion in 2014.

APPROVED INVESTMENTS IN THE TRANSPORT EQUIPMENT INDUSTRY BY SUB-SECTOR, 2014



"Domestic investment has been the driving force behind the automotive industry's growth, which has incorporated advanced technologies and high-level investments from global automotive players."

A total of 43 projects were approved in the automotive industry in 2014 funded by RM1.9 billion in investments. Domestic investments accounted for 58 per cent of this total (RM1.1 billion), while foreign investments made up the rest (RM800 million). The projects are estimated to create 4,039 jobs.

A total of 19 of these projects were new, with RM1.3 billion (68.4%) of total investments. The most exciting project involves a RM660 million investment in a foreign majority-owned company to manufacture engines and engine components for Energy Efficient Vehicles (EEVs). Another RM40.9 million was invested in the manufacture and assembly of commercial vehicles, special purpose vehicles and bulletproof vehicles. The 24 expansion/

diversification projects worth RM600 million include a RM60.6 million Malaysian-owned investment into a facility to manufacture knee airbags and an advanced pedestrian protection system.

These approved investments are in line with Malaysia's National Automotive Policy (NAP) 2014, which is focused on making Malaysia a regional hub for energy-efficient vehicles (EEV) and promoting a competitive, sustainable domestic automotive industry. Domestic investment has been the driving force behind the industry's growth, which has incorporated advanced technologies and high-level investments from global automotive players. These will not only ensure transfer of technology and innovation, but also create high-paying jobs and new economic opportunities for local companies.

Aerospace

Malaysia's nascent aerospace sub-sector currently includes eight aircraft assembly companies, 20 manufacturers of aircraft parts and 34 firms involved in maintenance, repair and overhaul (MRO) activities. The sub-sector attracted seven projects worth RM682 million

in approved investments in 2014, of which 27 per cent (RM187 million) came from foreign sources. These projects are expected to generate 524 jobs.

Six of the approved projects in 2014 were new projects involving RM508.7 million (75%) in investments, one of which is a Malaysian-owned facility with investments of RM340.1 million to manufacture aircraft composite parts for Airbus and Boeing airplane models such as the A320, A350, B737 and B787. However, the fastest growth in the industry was in MRO activities, which attracted RM312.8 million in approved investments in 2014. The Asia Pacific region is set to become the world's largest air travel market, and Malaysia must position itself to take advantage of new demand for MRO services in the near future.

Shipbuilding & ship repair

Malaysia's shipbuilding and ship repair (SBSR) industry includes the manufacture of a wide range of ships as well as ship repairing activities. According to UNCTAD's Review of Maritime Transport 2014, Malaysia has the 25th largest registered fleet in the world, with 531 ships and a combined tonnage of 9,212 thousand DWT.



There are around 100 registered shipyards in Malaysia, most of which specialise in building small-to-medium vessels. Larger shipyards service bigger ships like bulkers and tankers as well as manufacture or service offshore structures. They can also upgrade and convert Floating Production Storage and Offloading/ Floating Storage and Offloading (FPSO/ FSO) vessels.

Six projects worth RM3.1 billion were approved in 2014, with domestic investments accounting for 70 per cent (RM2.2 billion) of the total and foreign investments making up the rest (RM0.9 billion). The projects are expected to create 2,310 jobs, one of which is a new, RM2.9 billion joint venture project between a Malaysian majority-owned company and its Korean partner to manufacture Wing-In-Ground (WIG) craft. The technology transfer between the partners will enhance local capabilities and set a course for Malaysians to develop expertise in the whole WIG chain within the next three years.

As a whole, the approved investments in the SBSR industry are a good sign, especially since local players still dominate the Malaysian scene. There is plenty of room for expansion within for parts and components manufacturing, systems integration and other marine equipment production. Growth in the industry will be led by increasing global trading activities and the development of offshore O&G activities.

Machinery & equipment

The machinery and equipment (M&E) industry serves as an interconnecting link between many other industries across other sub-sectors of the economy. While it used to be mainly focused on servicing imported M&E to support agricultural and resource-based industries, today the industry helps support highly advanced facilities in front-end semiconductor processing, healthcare and O&G. It is imperative that the M&E industry keep pace with the needs of Malaysia's rapidly-changing manufacturing sector, which is why the Government is relentless in promoting its growth and expansion.

As it stands, Malaysia's M&E sector can be separated into four very broad groups: Industry-specific machinery and equipment, power-generating machinery and equipment, metalworking machinery and general industrial

EYE SEE ROBOTS

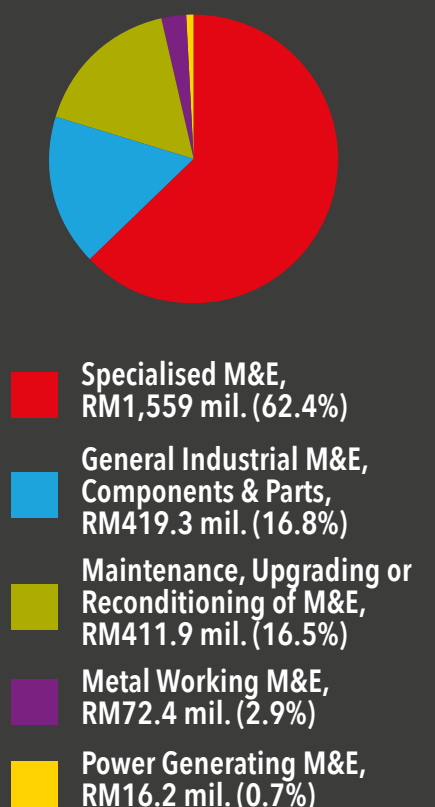


Imbuing robots with a visionary sense has been surprisingly challenging for researchers. Robots do not have the cognitive ability to fully interpret and navigate 3D environments, and rely on sensory trial and error to get around. More precise navigation systems use barcodes and even reflective tape. Until recently, robots basically had to be told what to look for and how to react when they came across it.

Majority Malaysian-owned company ViTrox Technologies intends to develop and produce intelligent robot vision systems and modules for the semiconductor, automotive and medical industries. The automated equipment is sophisticated enough to give robots full 3D vision and will mainly be used for high speed inspection in various hi-tech industries. Relying heavily on the Internet of Things (IoT) and Big Data for seamless machine to machine (M2M) connectivity, these machines will incorporate a vast array of finely-tuned sensors. The systems are also capable of self-learning, fuzzy logic algorithms, flexible image acquisition methods and predictive monitoring.

More than 35 per cent of ViTrox Technologies' workforce is in R&D, product development and testing. This RM1.1 billion diversification project will further complement Malaysia's semiconductor ecosystem, primarily for the inspection of complex, minute and 3D semiconductor packages.

APPROVED INVESTMENTS IN THE MACHINERY & EQUIPMENT INDUSTRY BY SUB-SECTOR, 2014



**TOTAL:
RM 2.5 BILLION**

machinery and equipment, modules and components. In 2014, a total of 98 M&E projects were approved with investments of RM2.5 billion. Of this total, 58 were new projects (RM970.7 million) while the other 40 were expansion/diversification projects. The majority (72%) of these investments came from domestic sources (RM1.8 billion), while foreign investments accounted for the rest (RM720.6 million). These projects are expected to generate about 4,568 new jobs.

Within the specialised M&E sub-sector, 37 projects with investments of RM1.6 billion were approved in 2014. These comprised 21 new projects with investments of RM246.7 million

(15.4%) and 16 expansion/diversification projects with investments totalling RM1.3 billion (84.6%). Domestic investments amounted to RM1.4 billion (87.5%) while foreign investments totalled RM148.5 million (12.5%).

The general industrial M&E sub-sector saw an influx of RM419.3 million in 54 approved projects, 32 of which are new projects worth RM263.4 million (62.8%) while the rest are expansion/diversification projects. RM288.5 million (68.8%) came from domestic investments while RM130.8 million (31.2%) came from foreign investors.

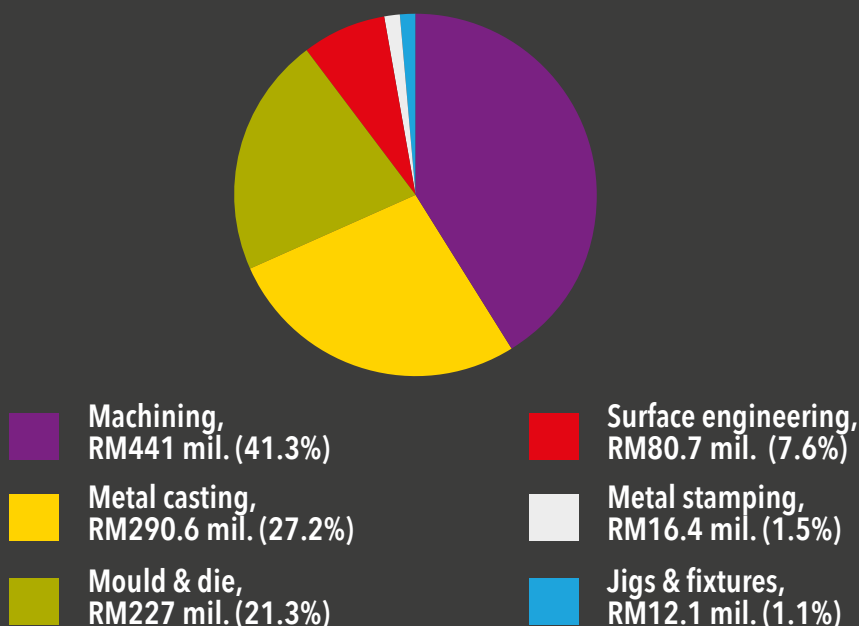
The maintenance, upgrading or reconditioning sub-sector attracted one new foreign project worth RM373.9 million and one domestic diversification project worth RM38 million in 2014. Total investments amounted to RM411.9 million. The power generating and the metalworking machinery sub-sectors had five approved projects with RM88.6 million mostly-foreign investment.

Engineering support

The engineering support industry (ESI) covers the gamut of moulds and dies, casting, machining, metal stamping, heat treatment and forging activities, all of which contribute significantly to the manufacturing and services sectors. Malaysia has won international recognition for its capability for consistent quality and on-time delivery, regardless of engineering activity. This is most evident in precision machining and fabrication. There are currently 1,200 ESI companies in Malaysia, providing products and services ranging from moulds and dies to metal fabrication.

Malaysian ESI players have retained the lead over those from cheaper nations thanks to their production of high value added products and integrated services. Further developments in Malaysia's ESI will focus on strengthening services, enhancing capabilities, and increasing the quality of both physical outputs and general service standards. As a whole, the industry is gearing up towards international certification in the supply of parts and components for the oil & gas, aerospace, medical and solar/ photovoltaic industries. Some major Malaysian companies capable of providing total manufacturing solutions globally are Alpha Master Sdn Bhd, Atasmi Precision Machinist Sdn

APPROVED INVESTMENTS IN ENGINEERING SUPPORT INDUSTRY BY SUB-SECTOR, 2014



TOTAL: RM 1.1 BILLION

Bhd, UWC Holdings Sdn Bhd, Lypometal Sdn Bhd, Kobay Technology Sdn Bhd and Kein Hing International Bhd. By producing high value-added modular components, they increase Malaysia's talent pool, knowledge base and international reputation.

A total of 68 ESI projects were approved in 2014 with RM1.1 billion in investments. There were 35 new projects with RM461.6 million in investments, while the other 33 projects were expansion/diversification projects worth RM605.9 million. Domestic businesses accounted for 44.8 per cent of the year's total investments (RM492.8 million), while foreign sources contributed the rest (RM574.7 million). The projects are expected to create a total of 2,489 new jobs.

Basic and fabricated metal products

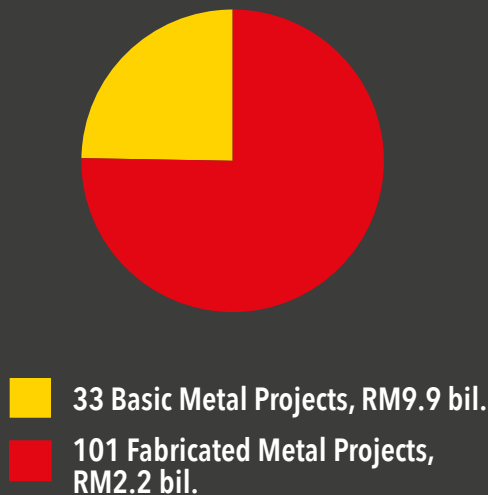
Malaysia's basic metals industry plays a vital role in the country's manufacturing and construction sectors. In 2014, the industry established the Malaysian Steel Institute to help it stay

competitive and promote inter-ASEAN business within the ASEAN Economic Community. Apparent steel consumption (ASC) was still dominated by long products, principally those used in the construction sector. Output of both flat and long products declined in 2014, although overall steel exports rose by eight percent.

The sub-sector experienced a large influx of FDI in 2014, especially in upstream projects. A total of 134 projects were approved with investments of RM12.2 billion in 2014, with foreign investments accounting for 72.13 per cent (RM8.8 billion) and domestic investments making up the rest (RM3.4 billion). These projects are expected to generate employment opportunities for 12,244 persons. Of the 134 approved projects, 33 were for basic metal products and 101 were for fabricated metal products.

The 33 basic metal projects were approved with investments totalling RM9.9 billion. Of this total, 21 were new projects with investments of RM6.6

APPROVED INVESTMENTS IN THE BASIC METAL AND FABRICATED METAL PRODUCTS INDUSTRY, 2014



**TOTAL:
RM 12.2 BILLION**

billion while 12 were expansion/diversification projects supported by investments amounting to RM3.3 billion. FDI amounted to RM7.9 billion (80%) of the total investments recorded while DDI totalled RM2.0 billion (20%). One of the projects approved will involve investments of RM4.2 billion to manufacture high speed wire rods, high strength bars, square billets, small-and medium-sized steel products and large scale H-shaped steel beams. Three other projects worth RM3.79 billion in total are aimed at manufacturing silicon manganese (SiMn), high carbon ferromanganese (HCFMn), medium carbon ferromanganese and sintered manganese ore.

Foreign investors in the basic metals sub-sector intend to make Malaysia a regional hub for steel manufacturing and distribution. Currently, the industry's focus is on Malaysia's construction and infrastructure needs. The construction of a slabs plant and a second hot-rolled coil plant has eased the local sourcing of such steel products by various midstream and downstream industry players. However, there remain vast

opportunities within the non-ferrous metal products sub-sector in this industry.

Meanwhile, 101 projects were approved in the fabricated metal products sub-sector in 2014 that will involve investments of RM2.2 billion. Domestic investments amounted to RM1.4 billion (64%), while foreign investments totalled RM800 million (36%). Of the 101 projects, 58 were new projects worth RM1.3 billion while 43 were expansion/diversification projects with investments of RM905 million. These projects are expected to generate 5,111 jobs.

Textiles & textile products

Malaysia's textiles and textile products industry encompasses a broad range of activities, from polymerisation to dyeing and printing. The industry became the country's 10th largest export earner in 2014, contributing approximately RM12.1 billion to Malaysia's total manufactured exports in 2014.

A total of 17 projects valued at RM1,233.2 million in investments were approved in 2014, of which 11 were expansion/diversification projects (RM1,199.6 million) while the rest were new (RM33.6 million). Foreign investors contributed 52 per cent (RM635.6 million) of the year's total investments, while domestic investors contributed the rest (RM597.5 million). Of the 17 projects approved, nine were for primary textiles production, five were for textile products and accessories and three were for made-up garments. These approved projects are expected to generate a total of 2,260 jobs, of which 1,971 will be in managerial, technical and supervisory manpower categories. Some of the high paying jobs to be created include engineers, quality controllers and high skilled technicians.

One notable diversification project in this industry will be a RM646 million expansion project by a majority Malaysian-owned company that will turn it into one of Malaysia's integrated textile manufacturers. The project involves the production of technical yarn and fabrics, as well as bleaching, dyeing, printing and finishing. The finished products shall have functional features such as being flame retardant, waterproof and offer protection against UV rays. They will also feature moisture management functions for sportswear applications produced under

prominent brands such as Nike, Under Armour, Cotton Inc, H&M and Sears.

Another interesting expansion project with additional investments of RM19.6 million will manufacture high-end technical textile coated and bonded gloves for personal protective equipment (PPE) applications. The range of applications for such coating technology may also be extended to include eco-friendly coatings and proprietary bonding of technical textiles for a variety of PPE products as well as medical and pharmaceutical goods. The company was prompted to make the investment based on emerging trends and increasing demand for electrically-insulated gloves as well as high-end PPE gloves that offer protection against chemicals, extreme temperatures, cuts and radiation.

In general, 2014's investment performance for textiles and textile products showed an increase of upstream investments in the production of natural and synthetic fibres, yarns and fabrics. These investments are mostly technology-driven, whereby new technologies are incorporated in the manufacturing processes of these projects. This positive performance reflects Malaysia's ability to attract quality investments which complete the ecosystem of the textile industry. The majority of these approved projects are also export-oriented.

Malaysia's textiles and textile products industry concentrates on higher-quality products and niche markets and has thus far remained resilient despite the global economic slowdown. Most of the approved projects in 2014 emphasise R&D activities to develop new, high-quality products. The projects will scale-up Malaysia's skill levels through intensive training programmes and will help reduce the nation's dependence on imported raw materials. The bilateral FTAs signed by Malaysia will also give the country a larger platform for growing high-end textiles and textile products industries through greater market access.

Medical devices

The domestic market for medical devices is growing at about 15.9 per cent per year and is expected to be worth USD2.8 billion by 2017. The industry employs over 46,000 people, mostly within managerial, professional, supervisory and technical roles. The industry

is dominated by more than 190 small and medium-sized companies, although over 20 MNCs have also made Malaysia an offshore manufacturing and services hub for their businesses.

Malaysia's medical devices industry is poised to take an important step in shifting its focus to higher value-added products and the ecosystems surrounding them. The industry has been identified as an important growth area under the Healthcare NKEA. The Government has announced eight Entry Point Projects (EPPs) for the medical devices sub-sector, which have given rise to 12 projects since 2012 with potential investments of RM1.3 billion. It is estimated that these projects will generate around 4,984 jobs and a GNI of RM1.3 billion by 2020.

Exports of medical devices hit RM13.5 billion in 2014. The country continues to be a major producer of medical gloves with exports valued at RM7.1 billion. Other major exports included instruments and appliances used in the electromedical equipment sub-sector (RM1.4 billion in exports), ophthalmic lenses (RM825.5 million) and orthopaedics (RM656.9 million). The country's major export destinations were the USA, Europe and Japan.

A total of 42 projects with investments of RM2.2 billion were approved in 2014, of which 14 were new projects with investments of RM1.2 billion and 28 were expansion/diversification projects with RM1.0 billion in investments. Foreign investments amounted to RM1.0 billion (45.5%) while domestic investments totalled RM1.2 billion (54.5%). These projects are expected to generate employment opportunities for 7,300 people.

About 91 per cent (38 projects) of the projects approved with investments of RM1.8 billion were for the manufacture of high-end and high value-added products other than medical gloves. One of these new projects involves investments of USD60 million for a facility to manufacture intraocular lenses (IOLs) for treating cataracts or myopia. Another RM57.2 million diversification project will manufacture computerised tomography scanners, ultrasound and computer radiography cassettes, blood analysers and gene chip scanners. The gene chip scanner will be the first of its kind to be manufactured in Malaysia. A Danish company



PHOTO An intraocular lens. Photo credit: Abbot

is also investing RM34.5 million to introduce nano-coating and 3D printing technology to manufacture hearing aids. All together, these three projects will create 985 jobs.

The projects approved indicate that Malaysia is gaining global interest from companies that produce higher-value goods. They provide an opportunity for Malaysia to cultivate a larger pool of home-grown talents able to support and accelerate the growth of the medical devices industry. Technological transfer from these projects will create better-skilled human capital and an innovative culture.

Agriculture & food processing

The agricultural sector comprises aquaculture and marine fisheries, the cultivation of crops, fruits and vegetables, floriculture, ornamental fish farming, livestock farming, and apiculture. Livestock, fisheries, fruits and vegetables are major sub-sectors with significant linkages to the Malaysian food processing industry. Under the Agriculture National Key Economic

Area (NKEA), GNI from agriculture is expected to increase by RM28.9 billion through 16 Entry Point Projects (EPPs) and 11 business opportunities. The Agriculture NKEA is also expected to create 74,600 jobs, mostly in rural areas with the targeted outcome of reducing the income gap between the rural and urban population.

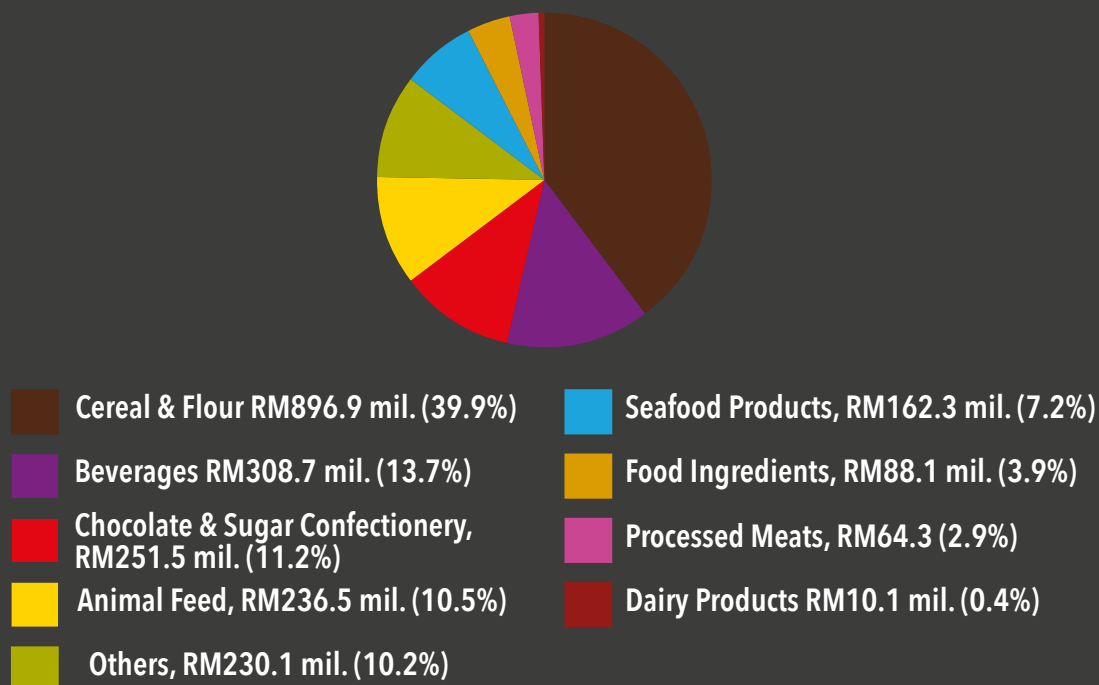
Investments into Malaysia's primary agriculture sector came up to RM170.5 million in 2014 involving 28 projects. Domestic investments amounted to RM169.9 million (99.7%) while foreign investments totalled RM0.6 million (0.4%). The projects include an expansion project by a wholly Malaysian-owned company with investments of RM51.5 million to undertake cage fish farming in Negeri Sembilan. A new project by a wholly Malaysian-owned company with investments of RM38.5 million will create a new chrysanthemum farm in Kinta, Perak.

The processed food sub-sector comprises all value-adding activities which utilise agricultural or horticultural products. The industry has been designated the Seventh National Key Result Area (NKRA) to address rising living costs and food safety and security. Several measures will thus be undertaken to liberalise the supply chain, including allowing more imports onto the market and utilising idle land for food production and cultivation.

A total of 68 projects with investments of RM2.2 billion were approved in 2014, of which domestic investments amounted to RM1.1 billion (47.1%) while foreign investments totalled RM1.2 billion (52.9%). These projects are expected to generate additional employment opportunities for 5,262 persons. The projects include an RM185.5 million expansion project by a wholly foreign-owned company to produce bakery products for one of the world's largest fast food chains as well as a new RM12.2 million project by a wholly Malaysian-owned company to produce food flavours and food ingredients.

"The processed food sub-sector has been designated the Seventh National Key Result Area (NKRA) to address rising living costs and food safety and security."

APPROVED INVESTMENTS IN THE FOOD PROCESSING SUB-SECTOR, 2014



TOTAL: RM 2.2 BILLION

Pharmaceuticals

Ever since Malaysia became a member of The Pharmaceutical Inspection Convention and Pharmaceutical Inspection Cooperation Scheme (PIC/S) in 2002, Malaysian-made pharmaceutical products have been accepted worldwide. In 2013, the global pharmaceutical market was valued at USD1.09 trillion and in Malaysia was valued at RM6.6 billion (USD2.1 billion), with an expected compound annual growth rate of 8.2 per cent until 2018. In 2014, Malaysia's total pharmaceutical exports were valued at RM1.2 billion, mostly comprising products such as pro-vitamins, antibiotics and hormones.

The Malaysian pharmaceutical industry has the capability to produce almost all dosage forms, including sterile preparations, injections and time release medications. Most major pharmaceutical companies in Malaysia focus on generic drugs, particularly antibiotics, painkillers, health supplements and injectables. As of October 2014, 252 facilities have been

licensed by the Drug Control Authority (DCA), Ministry of Health Malaysia.

The industry attracted RM747.3 million in 14 approved projects in 2014. These projects were mostly foreign investments amounting to RM487.3 million (65.2%), with domestic investments accounting for the rest. Six were new projects with investments of RM460.7 million (61.6%) and eight were expansion/diversification projects with investments amounting to RM286.6 million (38.4%). The projects approved are expected to employ about 1,100 people.

One of the significant projects approved in 2014 was a new foreign-owned project with total investments of RM67 million to manufacture active pharmaceutical ingredients (APIs) for oncology drugs. The project holds significant potential for boosting the ecosystem of oncology drugs and APIs in Malaysia.

The projects approved in 2014 represent the biggest breakthroughs in Malaysia's

BIG MEDICINE

Biopharmaceuticals are big. The market is projected to be worth USD497.9 billion by 2020, growing at a compound annual growth rate (CAGR) of 13.5 per cent between 2010 and 2020. It is estimated that biopharmaceuticals accounted for 22 per cent of big pharma companies' sales in 2013, and with patent applications for biopharmaceutical innovations growing by 25 per cent per year, the share of revenues contributed by biologic drugs can only rise further.

The reason for all the excitement is that unlike their chemically-synthesised cousins, biopharmaceutical products rarely cause side-effects and are therefore more likely to succeed in long-term treatments. These 'biologics' have molecular structures that are many times larger than that of their synthetic forebears and include such products as vaccines, blood or blood components, allergenics, somatic cells, gene therapies, tissues, recombinant therapeutic protein and even living cells.



The first, true biopharmaceutical was a genetically-engineered protein-based drug that was approved by the FDA in 1982 and is known today as insulin. Today, more than 1,500 biomolecules are undergoing clinical trials. Potential niche pharmaceutical products which have unique formulations or use special ingredients such as orphan drugs, herbal drugs and drugs for tropical diseases are also expected to have bright futures. In light of this development, the Government has expanded the scope of EPP3 - Malaysian Pharmaceuticals to include manufacturing activities for biopharmaceuticals such as biologic products and vaccines and over-the-counter (OTC) medicines.

pharmaceutical ecosystem, especially in the manufacturing of more sophisticated, higher value-added pharmaceutical products. Besides reducing national dependence on imports, the projects will also boost Malaysia's own knowledge base and skilled workforce.

Biotechnology

Malaysia has shown good progress in using sophisticated biotechnology-based approaches in the bio-medical industry, particularly in bio-pharmaceuticals, as well as applications in bioindustrial and bioagriculture industries. As of December 2014, a total of 247 companies have been awarded with Bionexus status by the Malaysian Biotechnology Corporation (BiotechCorp) with investments totalling RM4.6 billion and jobs for 9,078 people. The highest contributing sub-sector was bioagriculture (55.8%) followed by bioindustrial (29.5%) and biomedical (14.7%). These companies are mainly involved in drug discovery, biomaterials, biochemicals, molecular screening and

diagnostics, bio-based farm inputs and high-value food varieties.

Malaysia's potential in biotechnology is outlined in the National Biotechnology Policy (NBP). Creating business out of science, the second phase of the NBP policy, encourages commercialisation and realising value in the industry. The initiative promotes a conducive environment for Malaysia to grow as a key player in the bioeconomy field while strengthening the socio-economic benefits to the nation. It has been estimated that the bioeconomy sector will be worth RM181.2 billion by 2030 with an annual growth rate of 15 per cent.

To help Malaysia further progress into the biotechnology economy, the Bioeconomy Transformation Programme (BTP) was launched in October 2012 as part of Malaysia's overall goal to become a high-income nation by 2020. The BTP encourages the private sector's participation in developing the country's

bioeconomy by providing businesses a platform to optimise and launch commercial biotechnology opportunities. A total of 20 trigger projects were approved at the launch of the BTP in 2012, with a further five trigger projects being approved in 2014. It is estimated that BTP trigger projects will contribute RM4.2 billion to Malaysia's GNI by 2020, employing 18,100 people and involving RM13.7 billion in foreign investments.

A total of 22 biotechnology projects with investments of RM1.6 billion were approved in 2014. Three of the projects approved were for manufacturing licences, while the remainder were awarded Bionexus incentives. These new investments are expected to create 1,274 new jobs. One major American-owned project will involve investments of RM795.3 million to commercialise renewable chemicals and palm oil by products to produce high value chemicals. An Indian-owned project valued at RM258.6 million will manufacture biotherapeutics such as active pharmaceutical ingredients (APIs) and injectable finished products. These projects are expected to create 154 and 112 jobs respectively.

Domestically, a new project by a local company with investments of RM125 million will commercialise high-value *gaharu* (agarwood) essential oils for the formulation of nutraceuticals and cosmeceuticals using a hydro-distillation extraction technology developed in-house. The project will also involve collaborations with local universities and research institutes to develop and commercialise finished products in the form of fragrances and other *gaharu*-based value added products. This project will provide employment opportunities for 56 individuals.

The biotechnology industry in Malaysia has shown major progress, going from relying on traditional applications and technologies to employing more sophisticated biotechnology-based approaches. The investments in 2014 will not only have significant economic impact, but will also promote environmental sustainability, provide new job opportunities to Malaysians and improve the health and well-being of the nation. Malaysia's biodiversity gives it a competitive advantage in the biotechnology field, particularly through breakthroughs in agricultural productivity, discoveries in healthcare and the adoption of sustainable

industrial processes. By 2020, the biotechnology industry is expected to contribute five per cent to Malaysia's GDP with investments of RM8.0 billion and employ 280,000 people.

Oil palm products and palm biomass

Comprising palm oil, palm kernel oil, oleochemicals and derivatives (including biodiesel) and products from palm biomass (including energy generation), the oil palm industry is a major part of the national economy. While Indonesia is the world's largest palm oil producer, Malaysia is one of the industry's biggest exporters. It is the fourth largest contributor to Malaysia's GDP and currently accounts for RM53 billion in GNI with an NKEA target of RM178 billion by 2020.

Oil palm refining and crushing activities have reached maturity levels in Malaysia and are no longer promoted as growth areas. Nonetheless, there are significant investment opportunities in downstream activities that generate high value-added products, such as the palm biomass sub-sector – Malaysia's palm oil industry produces six types of biomass by-products that could be used in higher value-added downstream activities and which could contribute an additional RM30 billion to GNI. These include oil palm fronds, oil palm trunks, empty fruit bunch, palm kernel shells, mesocarp fibre and



palm oil mill effluent. Other downstream growth areas are in oleochemical-based products and nutritional foods and ingredients as well as R&D activities which generally involve high levels of technology.

Investments in the palm oil industry increased substantially in 2014 to RM5.7 billion in 49 projects compared with RM2.4 billion in 32 projects in 2013. These projects covered palm oil production, palm kernel oil products, oleochemicals, products from palm biomass and energy generation from palm biomass. Domestic investments totalled RM3.7 billion, while foreign investments amounted to RM2.0 billion. Most of the investments went into the oleochemicals sub-sector (RM3.9 billion), followed by palm oil and palm kernel oil (RM1.1 billion), biomass palm products (RM82.9 million) and palm biomass energy generation (RM580 million).

Malaysia accounts for about 20 per cent of global basic oleo production, making it one of the world's largest basic oleochemical producers. The country's shift into higher value-added derivatives like surfactants, agrochemicals, bio-lubricants and glycerol derivatives is an indication of how far the industry has come in Malaysia. The abundance of local raw materials and the availability of technology development in the oleochemical industry has spurred companies to produce speciality palm oil-based products including a broad range of alternatives to petroleum-based chemicals. These safe, eco-friendly oleochemicals will continue to be in high demand.

Of the 22 oleochemical projects approved in 2014, 14 are new projects and are estimated to generate 1,426 new job opportunities. Over 64.1 per cent of these investments are from domestic sources (RM2.5 billion) while the rest came from foreign sources (RM1.4 billion). One significant project is a new RM2.2 billion integrated biorefinery plant at the Palm Oil Industrial Cluster (POIC) complex in Lahad Datu, Sabah. The facility will take advantage of the global shift from petrochemicals to environmentally-friendly oleochemicals by producing various palm-derived chemicals such as methyl ester sulphonate (MES): a biode detergent and direct substitute for the petrochemical-based linear alkyl benzene sulfonate (LABS) used in many home and



PHOTO Aerial view of the Palm Oil Industrial Cluster (POIC) complex in Lahad Datu, Sabah

personal care products. The company's new metathesis technology will enable high-value oleo derivatives to be produced at lower costs and with lower capital investments than conventional processes.

Besides downstream oleochemicals, the industry also saw RM1.1 billion approved investments into seven projects within the palm oil refining sub-sector. Foreign investments in this sub-sector accounted for just over half of the total investments approved (RM608.6 million). Malaysia currently has 54 refineries and 44 crushing plants in operation, with a respective total capacity of 26.1 million tonnes and 6.9 million tonnes per year. Malaysia's main refined products include refined, bleached and deodorised (RBD) palm olein, stearin, margarine, vanaspati and specialty fat products.

In the palm biomass sub-sector, a total of 12 oil palm biomass projects with investments of RM82.9 million were approved in 2014 compared with 11 projects with investments of RM54.6 million in 2013. Domestic investments amounted to RM71.1 million while foreign investments amounted to RM11.8 million. The approved projects involve using empty fruit bunches and palm oil mill effluent (POME) to produce organic fertilizer, oil palm biopellets, peeled palm lumber and fibre.

Palm oil also comprised the lion's share of investments within the plantation and commodities sub-sector, attracting RM462.3 million (63.8%) of the RM724.2 million that was invested into the sub-sector overall. All of these investments were domestic.

Chemicals & chemical products

The chemicals and chemical products industry comprises agricultural chemicals, industrial gases, inorganic chemicals, paints, soaps and detergents, cosmetics and toiletries as well as other chemical products sub-sectors. It is one of Malaysia's most important industries due to its strong links to almost every other sector of the economy including the E&E, automotive, O&G, pharmaceuticals and construction industries. Establishing a more efficient domestic ecosystem for chemical products will reduce these industries' dependence on expensive imports, improving quality and production time.

Exports of chemicals and chemical products increased by 8.5 per cent to RM51.5 billion in 2014. Malaysia's chemical industry investment trends for 2014 show the potential for domestic and export market expansion. In 2014, a total of 45 projects with investments of RM5.9 billion were approved, of which 27 were new projects (RM630.4 million) while the rest were expansion/diversification projects (RM5.3 billion). Domestic investments amounted to RM365.7 million (5.8%) while foreign investments totalled RM5.6 billion. The approved projects are expected to create 1,941 new jobs.

Petroleum & petrochemical products

The petroleum and petrochemical industry comprises three main sub-sectors: natural gas, petroleum products and petrochemical products. Investments in this sub-sector have illustrated Malaysia's advancements in the industry through the years. Some of the approved projects will not only strengthen the existing industrial ecosystem, but also catalyse the continued development of the Oil and Gas (O&G) cluster.

A total of 19 projects with investments of RM15.9 billion were approved in 2014, ten of which were in new projects. Domestic investments accounted for 71 per cent of total investments (RM11.3 billion) while foreign investments made up the rest (RM4.7 billion). These projects are estimated to generate 1,581 jobs.

In general, total approved capital investments more than doubled last year, going from RM6.2 billion in 2013 to RM15.9 billion in 2014. This



is proof of the industry's positive response to the Economic Transformation Programme (ETP) where the oil, gas and energy sub-sectors have been identified as National Key Economic Areas (NKEAs). Notably, 2014 saw four new joint venture projects between PETRONAS and two foreign investors with total investments of RM14.8 billion. Located in the Refinery and Petrochemical Integrated Development (RAPID) complex in Pengerang, Johor, these projects will produce ethylene derivatives, propylene derivatives, elastomers and phenolic products.

In addition to these projects, 29 oil and gas mining projects were also approved in 2014 involving investments of RM13.4 billion. These projects will help ensure that Malaysia's petroleum and petrochemical industry will have a steady supply of raw materials in the years ahead. Domestic investments into the mining sector amounted to RM6.2 billion of the total amount of investments approved (46.3%), while foreign investments came up to RM7.2 billion (53.7%).

Plastic products

Malaysia's plastic products industry is one of the most significant and dynamic industries within the manufacturing sector. Its rapid growth in domestic downstream processing

THE ROTTERDAM OF ASIA

The Pengerang Integrated Petroleum Complex (PIPC) will transform Johor into one of Asia's biggest oil and gas hubs

Located on a single plot measuring about 20,000 acres in Pengerang, Kota Tinggi, the Pengerang Integrated Petroleum Complex (PIPC) will house oil refineries, naphtha crackers, petrochemical plants, petroleum and liquefied natural gas (LNG) terminals and a regasification plant.

PIPC's *raison d'être* is simple: demand for petrochemicals in the ASEAN region is growing rapidly as its member states gather economic steam. GDP growth in ASEAN has averaged a steady five per cent since 2007, boosted by strong domestic demand and intra-ASEAN trade. Future demand is expected to continue at a similar pace, driven by strong macroeconomic fundamentals, a growing middle class and increasing urbanisation. A study by the Boston Consulting Group in 2014 found that about 90 per cent of companies based in Malaysia and Singapore expect to expand their regional footprints over the next five years as ASEAN Economic Community integration begins to take hold.

In addition to producing premium fuel for European markets, the production activities in the PIPC will also allow Malaysia to grab a larger share of the USD3.0 trillion market for high-value, high-demand petrochemical products and by-products such as polymers, pharmaceutical products and plastics. Such goods are less susceptible to fluctuations in crude oil prices and allow Malaysia to generate greater value and investments within its oil and gas sector. Data from Platts/McGraw Hill Financial indicates that global petrochemical prices plunged by 40 per cent in January 2015 compared to a year earlier. However, the price of crude oil declined by 50 per cent over the same period.

To date, two major catalytic projects have been committed within the PIPC area. The RM9.0 billion Pengerang Deepwater Terminal involves joint ventures between

DIALOG Group Berhad and its partners (Royal Vopak of Netherlands, PETRONAS and the Johor State Secretary, Incorporated). The second mega-project within PIPC is Pengerang Integrated Complex (PIC), an integrated development by PETRONAS consisting of the Refinery and Petrochemical Integrated Development (RAPID) and associated facilities. RAPID will involve investments of USD16.0 billion (RM53.0 billion) while the associated facilities will involve investments of about USD11.0 billion (RM36.0 billion).

Nonetheless, Malaysia is not alone in its pursuit of becoming a regional petrochemical hub. Demand for key petrochemicals has been growing at a healthy 4.5-to-6.1 per cent between 2008 and 2014 across Indonesia, Thailand, Malaysia and Vietnam. This demand has largely been met by Singapore, Thailand and the Philippines, all of which saw production grow by double digits over the same period. Several other petrochemical megaprojects within ASEAN are also set to come online over the next five years, particularly in Vietnam, Indonesia and Brunei. In all, ASEAN is expected to see more than USD50 billion in investments in integrated refinery and petrochemical sites by 2020.

PIPC will be the catalyst that transforms Johor into a new regional downstream oil and gas hub in the coming years and will position the state as the Rotterdam of Asia. The entire development targets total investments of RM170 billion and is expected to boost Malaysia's gross national income by an additional RM18.3 billion by 2020. Its development will be supported by lower prices for petrochemical feedstocks, the country's well-developed infrastructure, strong supporting services, the country's cost competitiveness as well as its strategic location along major East-West trade routes.

activities can be attributed to Malaysia's growing petrochemicals sub-sector, which is able to provide a stable and continuous supply of raw materials including world-class resin production facilities.

Plastics exports grew by 11.6 per cent to RM11.9 billion in 2014. Manufacturers have been able to maintain export growth despite rising costs by moving up the value chain and focusing on producing higher quality products. The industry is moving in tandem with other industries and acquiring appropriate technologies to optimise performance and maximise productivity and efficiency.

A total of 51 projects with investments of RM884.4 million were approved in the plastics sector in 2014, of which 36 were new projects involving investments of RM604 million while the rest were expansion/diversification projects with investments of RM280.5 million. Domestic investments accounted for 85.4 per cent of the total investments approved (RM755.2 million), while foreign investments made up the rest (RM129.2 million). Seven approved projects were wholly foreign-owned (RM70.9 million in investments), 33 projects were wholly Malaysian-owned (RM537.5 million) and 11 projects were joint-ventures (RM276 million). These projects are expected to create 4,278 new jobs.

Rubber products

One of Malaysia's best-established industries, the rubber products industry can be categorised into latex products, tyres and

tyre-related products as well as industrial and general rubber products. Small and medium enterprises (SMEs) dominate this industry, which is shifting towards high value-added products and high technology rubber products for engineering, construction and marine purposes.

Malaysia is not only seeing a growing trend in rubber recycling today but is also venturing into manufacturing 'green' rubber-based goods produced using eco-friendly materials like Ekoprena and Pureprena. These efforts are in line with the establishment of Rubber City in Ladang Bukit Ketapang, Kuala Nerang, Kedah which will further develop the rubber-based industry with its industrial, commercial and R&D hubs.

A total of RM1.3 billion was invested into 15 approved projects (excluding medical devices) in 2014. Ten of these were new projects with investments of RM1.2 billion, while the rest were expansion/diversification projects with investments totalling RM124.9 million. Over 92 per cent of this total came from domestic sources (RM1.2 billion), while foreign sources made up the rest (RM103.1 million). A total of 11 of the approved projects were wholly Malaysian-owned (RM1.2 billion), two projects were joint-ventures (RM6.9 million) and one project was wholly foreign-owned (RM101.4 million). The investments mainly covered the recycling of waste tyres into recycled rubber powder, fuel oil, carbon black and steel wires, and the manufacturing of industrial and general rubber products. The approved projects are expected to generate 1,728 jobs.

Consumer & Industrial	Packaging
No. of projects: 31 Investments: RM614.7 million Out of the projects approved, 18 were new projects (RM374.4 million in investments) while 13 were expansions/diversification projects (RM240.3 million). Eleven projects were investments in the manufacture of injection moulded plastics products and assembly thereof.	No. of projects: 12 Investments: RM197.6 million Twelve approved projects in this sub-sector will involve the manufacturing of flexible packaging, sheets, bags and film. Of these, ten were new projects (RM181.4 million invested) and two were expansions and diversification projects (RM16.2 million).
Recycled goods	Specialised plastics
No. of projects: 5 Investments: RM39.3 million All the projects were new projects focused on recycling plastics to produce ingot bars, recycled diesel, recycled aluminium and recycled plastic compounds.	No. of projects: 3 Investments: RM32.9 million Three specialised plastic projects were new, backed by investments of RM32.9 million.

TABLE Investments in the plastic products industry in 2014

Wood & wood products

Over the years, Malaysia's wood-based industry has transformed from being a primary processing industry into a more advanced and technology-driven industry that produces a significant number of downstream value-added products. A total of 48 projects were approved in 2014 with RM465.4 million in investments, of which 34 were new investments (RM255.7 million) and 14 were expansion/diversification projects (RM209.7 million). Domestic investments amounted to RM422.9 million while foreign investments came to RM42.5 million. A total of 3,815 jobs are expected to be generated by these projects.

Most of the investments in 2014 went into the furniture sub-sector, which attracted RM228.9 million worth of investments in 18 projects. Of these, 14 were new projects with investments of RM135.2 million, while the remaining four were expansion/diversification projects worth 93.7 million. Domestic investments accounted for RM216.5 million of total investments in this sub-sector while foreign investments of RM12.4 million made up the rest.

The panel products sub-sector and the mouldings and builders' carpentry and joinery sub-sector each attracted seven and four projects respectively with approved investments of RM88.1 million and RM45.9 million. In addition, 19 projects with investments of RM102.5 million were approved for the manufacture of other wood-based products and materials such as wood pellets, sawn timber and agriculture waste or agricultural by-products.

Non-metallic mineral products

This industry comprises non-metallic products like clay, ceramics, cement, concrete, glass, quicklime, barite, marble and granite. The industry was Malaysia's 15th largest exporter between in 2014, accounting for RM5.7 billion of the country's total manufactured exports. The major export destinations were Singapore, Republic of Korea and Indonesia.

In 2014, a total of 30 projects with RM3.4 billion in investments were approved in this industry. A total of 18 of these projects were new and involved RM2.5 billion in investments, while the other 12 were expansion/diversification projects backed by RM945.7 million of investments.

Most (61%) of the investments came from domestic sources (RM2.1 billion), while the rest came from foreign sources (RM1.3 billion).

Of the above projects and investments, 17 projects involved cement and concrete, six were in glass and glass products, five were in ceramic products and two were in mineral processing activities. One of the biggest projects in the sub-sector is a RM634.2 million wholly foreign-owned project to produce environmentally-friendly insulation materials used in buildings. The material is in line with the National Green Technology Policy and will also aid in the production of glass and glass products for insulation applications. The company expects to export 95 per cent of its products, mainly to Australia, Japan and the Republic of Korea.

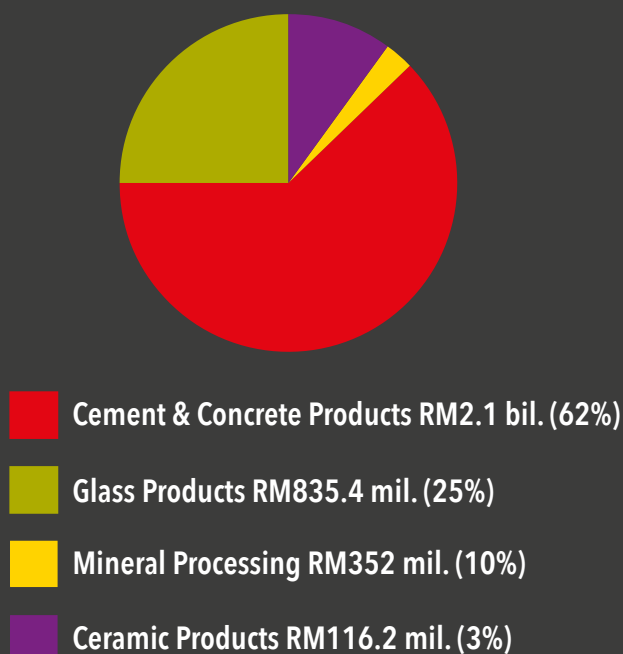
Another interesting project is a new RM249.6 million facility in Setiu, Terengganu that is a joint-venture between TRG Industrial Minerals Sdn Bhd, Toyota Tsusho Corporation (Japan & Malaysia) and Tochu Corporation (Japan). Known as Terengganu Silica Consortium Sdn Bhd, the company will manufacture high purity, ultra-pure silica sand and flour, resin-coated sand and frac sand. These materials are used in high technology and speciality industries like TFT-LCD glass substrates, solar grade silicon, electronics, specialty glass, float glass and automotive applications. About 70 per cent of the products will be exported.

The Government's drive to increase the use of Industrialised Building Systems (IBS) is aimed at reducing construction costs while increasing all-round quality. IBS encourages green practices and technology in pursuing growth. The glass and glass products industry is expected to expand to encompass functional materials as well as low emission glass, high performance glass and special coating glass to meet increasing demand from the construction and solar industries. Energy-efficient insulation products such as glass fibres and coated glass are very environmentally-friendly and can help reduce the cost of buildings.

Paper, printing & publishing

In recent years, the Malaysian paper industry has progressively doubled its production capacity, with a recorded 90 per cent self-sufficiency in the supply of paper and paper

INVESTMENTS IN PROJECTS APPROVED IN THE NON-METALLIC PRODUCTS INDUSTRY BY SUB-SECTOR, 2014



TOTAL: RM 3.4 BILLION

products. There are 23 paper mills with a total production capacity of about 1.9 million metric tonnes annually. Wastepaper is the main raw material used by industries to produce their paper products. To date, this industry has provided employment opportunities for more than 4,000 people.

The domestic printing and publishing industry consists mainly of small and medium-scale domestic-oriented manufacturers. There are currently about 1,000 companies in operations, mainly engaged in general printing. Imports of paper and paper products amounted to RM5.7 billion in 2014 compared with RM3.0 billion in exports.

In 2014, a total of 17 projects were approved with investments of RM904.3 million, an increase of 36 per cent compared with RM574.5

million in investments approved in 2013. Nine of the projects approved were expansion/diversification projects with investments of RM706.1 million (57.4%), while the other eight were new projects with investments of RM198.2 million (22%). Foreign investments amounted to RM555.8 million (61.5%), while RM348.5 million (38.5%) were contributed by domestic investments. These projects are expected to provide employment opportunities to almost 2,144 people.

The highest investments were recorded in the paper products sub-sector with RM816.8 million (10 projects) followed by the printing and publishing sub-sector with RM72.5 million (4 projects).

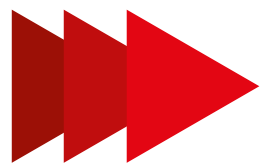
REDtone

REDtone MEX Sdn Bhd

Teleradiology Centre

SERVICES WITH A SMILE

The tertiarisation of Malaysia picked up pace in 2014 as the country services sector positions itself to be one of the strongest in the region.



• • • • •



REDtone Mex Sdn Bhd is investing RM120.9 mil. to set up the biggest Medical Exchange (MEX) Telehealth Solution in South East Asia. The facility will focus on image-based teleconsultation/teleradiology exchange and cloud-based personal health records (PHR).

MALAYSIA'S SERVICES SECTOR CONTINUED TO expand in 2014, attracting 5,059 approved projects in 2014 with investments amounting to RM149.6 billion. Domestic investments amounted to RM131.9 billion and foreign investments totalled RM17.7 billion. The projects approved are expected to create 98,543 job opportunities.

The real estate sub-sector continued to dominate as the leading investment sub-sector with RM88.5 billion worth of investments

approved. This was followed by the utility (RM9.0 billion), distributive trade (RM8.7 billion), financial services (RM6.9 billion), and hotels and tourism (RM6.7 billion) sub-sectors. To ensure sustainable growth of the services sector, one of the Government's measures includes progressive liberalisation of the services sector. This will enhance the sector's competitiveness and allow it to contribute more significantly to the national economy.

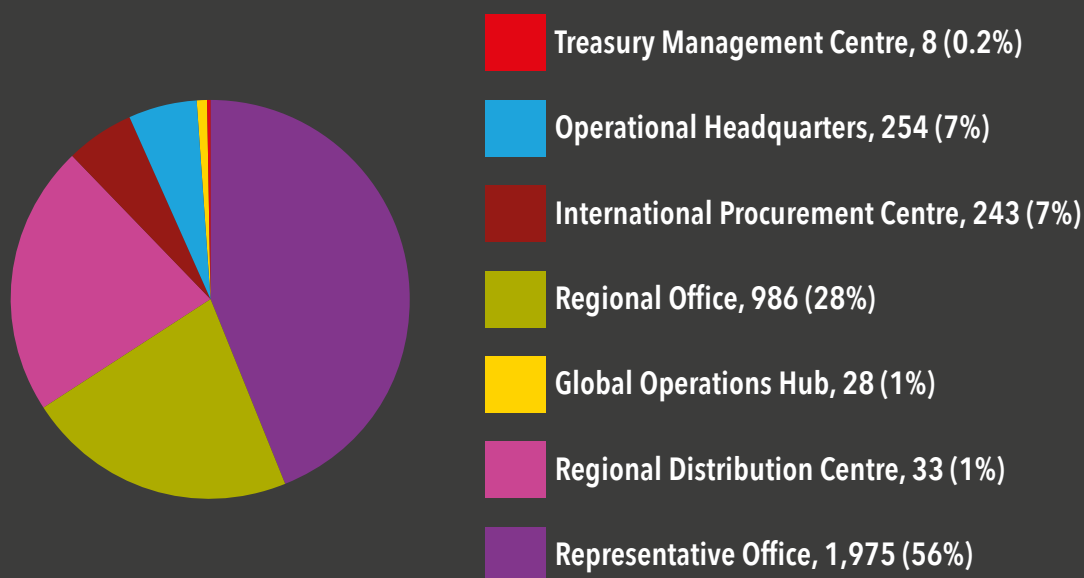
The services sub-sectors form the foundations of Malaysia's essential intermediate services. These services help optimise the efficiency of other sub-sectors and industries in the country, and regional establishments and end-to-end supply chain management services are fast becoming important components in the nation's economic backbone. These regional establishments and supply chain management services help increase trade efficiency and competitive advantage for Malaysian industries.

Malaysia's higher intra-ASEAN trade activities and various ASEAN's economic cooperation initiatives underpin the importance of the ASEAN regional market. The implementation of the ASEAN Economic Community (AEC) is aimed at making ASEAN a fully-integrated investment region, and this will increase the number of opportunities for trade and investment for businesses located in Malaysia. The new Principal Hub incentive (to be introduced in early 2015) is also expected to support Malaysia's continuous growth as a preferred regional investment destination in today's highly competitive environment.

REGIONAL ESTABLISHMENTS & LOGISTICS

Malaysia continued to strengthen its position as a competitive regional operation base for major MNCs in 2014 through the establishment of their operational headquarters, regional distribution centres, international procurement centres, treasury management centres and integrated logistics services centres. These new centres support Malaysia's potential to become the regional and global operations hubs for both the manufacturing and services sectors by capitalising on its strategic location, world class infrastructure, increased trading activities and the pro-business Government policies. They are supported by logistics service providers that

REGIONAL ESTABLISHMENTS APPROVED AS AT 31 DECEMBER 2014



TOTAL: 3,527 ESTABLISHMENTS

offer regional and global supply chain solutions in air, land and sea freight.

As at 31 December 2014, a total of 3,527 projects were approved to establish regional operations in Malaysia. These establishments provide a broad spectrum of services ranging from supply chain management, logistical services and banking and financial services.

Global Operations Hubs

The rise in globalisation, offshoring and outsourcing has marked a paradigm shift in global business. Trade openness, liberalisation and international markets have led MNCs to reach outwards, and Malaysia stands to profit greatly from these trends. Not only is the nation a cost-competitive transport hub, but its workforce is becoming increasingly skilled. Today, the nation is a vital link in many MNCs' global supply chains.

In 2014, seven global operations hub projects were approved involving investments of RM2.4

billion and employing 1,268 people. These projects have a significant knock-on effect on the economy, such as the RM1 billion expansion project by PKT Logistics (M) Sdn Bhd to build a warehouse in Shah Alam, Kuantan and Pulau Pinang which will create 286 job opportunities for Malaysians. The company's proposed One Eastern Hub warehouse in Kuantan, Pahang will be the biggest hub in the East Coast Region that will cater the customers in the oil and gas industry.

France-based Atos Group SE intends to open its Asia Pacific Innovation and Management Hub via its subsidiary Atos Worldline Sdn Bhd. The office will provide innovative digital services for mobility, e-transactional services, digital retail and other such services. Another significant project comes from flash memory specialist SanDisk Corporation via its Malaysian subsidiary SanDisk Storage Malaysia Sdn Bhd. The subsidiary has been designated the company's Global Supply Chain Management Centre, taking the place of SanDisk's previous hubs in Shanghai and Hokkaido. Their plans involve

creating a manufacturing excellence centre to ensure quality factory performance.

Operational Headquarters

As at 31 December 2014, Malaysia was host to a total of 254 operational headquarters (OHQs) with RM6.04 billion in total investments. Six of these OHQs were from Malaysia, while the rest were mostly MNCs from the USA and Europe. It is worth noting that 25 of these OHQs were from the O&G industry alone. These new OHQs have generated over 13,609 jobs for Malaysians.

A total of 16 OHQ projects were approved in 2014 with investments of RM1.94 billion. Six approved OHQ projects came from Singapore, with Australia bringing three and Germany bringing two OHQs to Malaysia respectively. Ireland, Bermuda, the Cayman Islands, Denmark and Japan brought one OHQ each. Collectively, these projects are expected to create 945 jobs.

Among the major OHQs approved in 2014 is Openet Telecom Malaysia Sdn Bhd. Openet is an Ireland-based company providing software for real-time billing, entitlement management, and analytic services to its customers worldwide. Openet's Malaysian headquarters is its largest centre outside Ireland providing local resources, services and support to customers in Ireland, the USA and France. Openet Telecom Malaysia Sdn Bhd will employ 144 local senior managers and technical staff.

Another notable project comes from the USA-based First Solar Inc. Its subsidiary First Solar Malaysia Sdn Bhd operates Malaysia's largest photovoltaic manufacturing facility, and in 2014 the company's plans to establish a global shared service centre of excellence were approved. The centre will provide services in information technology, finance, human resource, marketing and logistics to its 12 related companies in countries such as the USA, Germany, Canada and Vietnam. This project is expected to generate 30 high-income job opportunities.

International Procurement Centres (IPCs)

Company OHQs are frequently complemented by international procurement centres (IPCs). Malaysia currently hosts 243 IPCs as of 31 December 2014 with a total annual sales turnover estimated at RM75.9 billion.



Investments into these IPCs amounted to RM8.9 billion, 39.9 per cent of which are owned by Japanese corporations (97 IPCs) with the rest from Malaysia (40), the USA (18), Singapore (17), Taiwan (11) and Germany (5), while the remaining were from countries such as Canada, the UK, India, Indonesia, Switzerland and the Cayman Islands.

A total of 128 (52.7%) of these IPCs service the E&E industry while the remaining IPCs service the chemicals/petrochemicals (32), machinery and industrial parts (19), textiles (11), oil and gas (10), furniture (8) and other industries. That said, many IPCs have begun diversifying to include supply chain management for their Asia-Pacific operations as they seek synergies to optimise their manufacturing processes.

Six IPCs were approved in 2014, three of which were from Japan with the rest from Malaysia, Singapore and the Cayman Islands (one each). These IPCs involve investments of RM394.4 million and an estimated total annual sales turnover of RM797.7 million. They will create

employment opportunities for 72 Malaysians, mainly in the managerial, technical and skilled categories.

One notable approved IPC in 2014 was Penfibre Sdn Bhd (PFR), a wholly-owned subsidiary of Toray Industries Inc. of Japan. The company has two manufacturing divisions involved in making polyester staple fibre, polyester chips and polyethylene terephthalate (PET) chips and films. The company's IPC in Malaysia will help it to better serve its end-users in the region and identify future market demand for certain film products in Asian and international regions. It is estimated that the IPC will generate a total sales turnover of RM377 million over the next three years.

Another major approved Asian IPC comes from Nihon Superior Asia Sdn Bhd, a subsidiary of Nihon Superior Incorporation, Japan. Its IPC will allow the company to procure and distribute lead-free soldering products and flux to its related and non-related companies in Malaysia and overseas. The project will increase the utilisation of local ports and airports by Nihon Superior Asia Sdn Bhd by 184 per cent, with sales by its IPC rising from RM16.9 million in the first year of operation to RM48 million by the third year.

Regional Distribution Centres (RDCs)

As of 31 December 2014, 33 Regional Distribution Centres (RDCs) have received approval with total investments of RM735.6

million and an annual sales turnover worth RM4.2 billion.

million and an annual sales turnover worth RM4.2 billion. A total of 785 job opportunities are expected to be created with these RDC approvals, of which 700 (89.2%) are for Malaysians.

A total of three RDCs were approved in 2014. These RDCs were companies from Malaysia, Germany and France with investments totalling RM374.1 million and an estimated total annual sales turnover of RM851.3 million. The projects will create employment opportunities for 55 Malaysians.

One of the RDCs approved in 2014 was a Malaysian-based company that provides technical solutions as well as centralised procurement to ensure the timely delivery of comprehensive packaging products. The project will strengthen the position of its parent company as the market leader in the production of stretch films. A total of 30 jobs were created with this RDC, mainly in management, technical and supervisory roles.

A French company that first established its factory in Malaysia in 2007 is expanding its



presence in Malaysia through the RDC activities in order to meet the demands of its business partners for both quality and economies of scale all over Asia. The company has 70 employees and produces more than 100 food flavours for major international restaurants and hotel chains in over 37 countries.

Treasury Management Centres (TMCs)

The Government encourages corporations to use Malaysia as a base for conducting regional or global treasury management activities for their group of related companies within or outside the country.

A total of eight TMCs with total investments of RM186.9 million have been approved as of 31 December 2014. These TMCs are also expected to create 130 jobs, mainly for Malaysians. Four of these TMCs were approved in 2014 backed by investments of RM120.3 million and creating 56 jobs. Three of these projects were Malaysian while one was from Hong Kong. The four TMCs were in the logistics and shipping industry as well as in the agribusiness sector.

Representative Offices (REs)/Regional Offices (ROs)

As of 31 December 2014, Malaysia is host to a total of 1,975 Representative Offices (REs) and 986 Regional Offices (ROs). These REs/ROs were established to undertake feasibility studies on investment opportunities in Malaysia and to

coordinate business activities for their parent companies regionally.

A total of 72 RE projects and 48 RO projects were approved in 2014 with total investments of RM163.6 million. Most REs/ROs approved in 2014 came from Singapore (20 projects), Germany (11), UK (10) and USA (7). However, there was also an uptick of interest from countries such as Spain (5 projects approved), India (4), Italy (4), Thailand (4) and Indonesia (2). UAE, Canada and Iceland each had one RE approved in 2014.

Most new REs/ROs were in machinery and engineering support, O&G, E&E, medical devices and IT and software industries. This trend is consistent with the promotion of National Key Economic Areas (NKEAs) implemented by the Government. These RE/ROs are expected to create a total of 312 jobs, of which 65.7 per cent or 205 jobs are expected to be filled by Malaysians.

Logistics

Integrated Logistics Services (ILS) activities comprise warehousing, transportation, freight forwarding and other related value-added services such as distribution and supply chain management undertaken on an integrated basis. As of 31 December 2014, a total of 58 companies with investments valued at RM3.7 billion have been granted ILS incentives. Of these companies, nine were new projects and 49 were expansion projects. In 2014, nine



PKT Logistics' One Logistics Hub in Shah Alam will be expanded to include the construction of "The Lighthouse Warehouse", the tallest warehouse in Malaysia and the first certified green warehouse by the Green Building Index (GBI).

companies were approved for ILS incentives, indicating that local logistics providers have improved their capabilities to expand and serve regionally. These companies are venturing into logistics activities with total investments of RM149 million.

International Integrated Logistics Services (IILS) refers to companies capable of providing integrated and seamless (door-to-door) logistics services along the value chain as a single entity on a regional or global scale. Qualified IILS companies will be issued a Customs Agent Licence to facilitate business operations. In 2014, eight companies were awarded IILS status in Malaysia, including Worldgate Express (M) Sdn Bhd: a Malaysian owned company that provides logistics services to more than 20 countries.

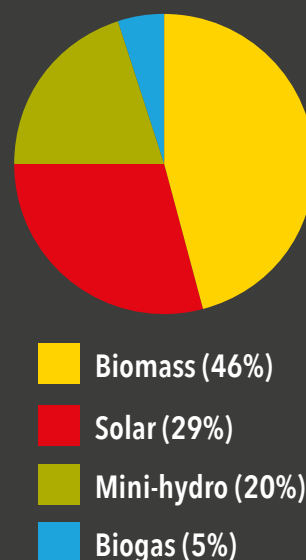
OIL & GAS SERVICES

The plunge in global crude oil prices in 2014 underscored the need for Malaysia's O&G industry to reinvent itself and innovate new revenue opportunities and services. In 2014, four projects with investments of RM3.2 billion by O&G service companies will offer the industry new services in both upstream and midstream activities like repair, refurbishing and upgrading facilities. These projects are expected to create 2,807 jobs.

There were several significant projects within the O&G sub-sector in 2014, including a RM374 million project by a Schlumberger-related company which aims to brand Malaysia as a centre for the supply of equipment maintenance and modification services for the O&G industry in the Asia Pacific region. The company plans to establish an Asia Centre for Reliability and Efficiency (ACRE) to undertake O&G services.

To further strengthen the O&G ecosystem, the GE Remote, Monitoring and Diagnostic Kuala Lumpur Centre (GE's iCenter) was launched in October 2014 to provide critical support to the overall operations of major O&G companies worldwide. The iCenter in Kuala Lumpur is fully integrated with the other GE iCenters in Florence and Houston to monitor and enhance rotating equipment availability, reliability and performance through predictivity solutions. The establishment of this centre will further enhance Malaysia's position as a global hub for O&G industry.

SHARE OF INVESTMENTS IN APPROVED RENEWABLE ENERGY (RE) PROJECTS BY SOURCE, 2014



RENEWABLE ENERGY

The Government has made renewable energy (RE) the Fifth Fuel in the National Energy Policy, which is designed to encourage more renewable energy-related projects and the utilisation of the country's vast renewable energy (RE) sources. At least 90 per cent of all of Malaysia's RE needs can be filled by its own biomass and solar sources, which would constitute a major step forward in the Government's goal to reduce carbon emissions by 40 per cent per GDP by 2020.

As a major producer of agricultural commodities in the region, Malaysia is well-positioned to promote the use of biomass as a renewable energy source. Oil palm waste is already the main source of biomass for renewable energy at many oil palm plantations in the country. Malaysia's equatorial position also makes it a prime location for solar energy applications. The country sees six hours of sunshine every day on average (2,190 hours a year). Its rivers also allow it to fully exploit hydroelectric technologies with in situ mini-hydro projects that can supply electricity to rural areas far off the grid. Further studies are already



In order to meet energy demands, increase energy efficiency and become eco-friendly, many companies have started investing in renewable energy (RE), energy efficiency and energy conservation technologies.



underway to explore the country's potential in geothermal, wind and ocean thermal energy.

There were RM1.2 billion in investments in 2014, of which 96.6 per cent came from domestic sources (RM1.16 billion). The projects are expected to create 743 jobs via 55 solar energy projects backed by RM348.6 million in investments and 15 other projects in biomass, biogas and mini-hydro with RM870.0 million in investments.

One notable project is a RM440.1 million project at Bio-XCell Biotechnology Park in Nusajaya, Johor to generate steam and chilled water with biomass and biogas sources such as palm kernel shells (PKS), mesocarp fibre, wood pellets, wood chips and industrial waste water. The output will be supplied to companies located in the Bio-XCell Biotechnology Park itself. The company uses new integrated utilities concepts to supply steam and chilled water to its facilities.

Another notable project is a mini-hydro project with RM220.5 million in investments being developed in two locations: Kuala Kangsar and Lenggong (both in Perak). The projects will generate 20MW of electricity that will be supplied to TNB via the Feed-in-Tariff programme. Mini-hydro energy generation is a reliable source of RE that uses proven technologies and is more cost-effective and less environmentally harmful than their larger counterparts.

ENERGY EFFICIENCY & CONSERVATION

Though Malaysia currently relies on conventional fossil fuels for its energy needs, their limited availability and environmental impact make them impractical for long-term use. In order to meet energy demands, increase energy efficiency and become eco-friendly, many companies have started investing in

renewable energy (RE), energy efficiency and energy conservation technologies.

Increased power tariffs have also encouraged firms to evolve and adapt more energy-efficient technologies in order to remain competitive. Government incentives and encouragement are also factors in making companies more eco-friendly.

Seven energy efficiency and conservation projects were approved in 2014. Three were undertaken by manufacturing industries, while four were from the hospitality sub-sector and integrated properties development. Tax incentives were given to these projects to encourage further activities in the same vein. A total of RM59.0 million was invested in these projects, as opposed to RM31.7 million invested in similar projects in 2013. These were overwhelmingly domestic investments, with 98.9 per cent coming from local sources. They are also expected to provide 69 employment opportunities.

One major project is an office tower employing green building concepts in Sunway Resort City, Selangor. This RM40.4 million energy-efficient, power-saving building uses several improved systems for its air-conditioning and mechanical ventilation needs as well as energy efficient lighting and lift systems.

ENGINEERING SERVICES

One of the seven NKEAs of the Economic Transformation Programme (ETP) is Business Services. Nurturing Pure-Play Engineering Services is the fifth Entry Point Project within this NKEA, highlighting its importance to Malaysia's economic development.

The Performance Management Delivery Unit (PEMANDU) estimates that Malaysia's aerospace and automotive engineering services industry could be worth RM3.3 billion by the year 2020. Combined with the many engineering graduates that will enter the workforce by that time, the nation's engineering services are expected to grow by leaps and bounds.

Among the quality investments approved in 2014 was an expansion project worth RM46.7 million in Subang, Selangor. This centre will provide engineering services for the aviation sub-sector, including structural modernisation

Criteria	2011-2012		2013-2014		2014-2015	
	Rank	Score	Rank	Score	Rank	Score
Pillar 12: Innovation	24	4.3	25	4.4	21	4.7
Quality of Scientific Research Institutions	24	4.9	15	4.9	13	5.2
Company Spending on R&D	13	4.7	17	4.6	9	4.9
University-industry collaboration in R&D	21	4.9	4	4.8	3	5.2
Government procurement of advanced technology products	4	4.9	4	4.8	3	5.2
Availability of scientists and engineers	22	4.9	19	4.9	9	5.2
Utility patents granted per million population	32	7.2	31	12.1	32	12.6

TABLE Malaysia's Score and Ranking in the Innovation Pillar, Global Competitiveness Report, 2011-2015

and engine test stand development. The project will benefit 23 local engineers who will undergo specialised aviation technical training.

RESEARCH & DEVELOPMENT (R&D)

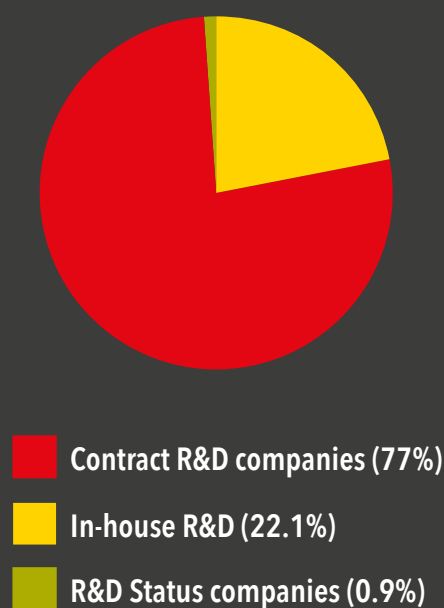
R&D is an important national agenda that makes Malaysia more competitive and sustainable and can give the country international prominence and market leadership. The spillover effects from R&D are dynamic and wide-ranging, leading to state-of-the-art products, productivity improvements, higher employment income and earnings on foreign exchange.

To spur investments in R&D, incentives and grants are provided to encourage more R&D activities in the areas of ICT, engineering, sciences, agriculture, biotech and forestry. The National Science, Technology and Innovation Policy 2013-2014 aims for Malaysia to achieve Gross Domestic Expenditure on R&D (GERD) of at least 2.0 per cent by 2020.

The Global Competitiveness Report 2014-2015 has moved Malaysia up four notches from 24th place out of 144 countries in 2013-2014 to 20th place in 2014-2015. Malaysia's progress can be best seen in how it scored in Innovation. The report showed that the nation improved in each of the criteria measured with a score of 4.7 out of 7 points in Pillar 12: Innovation.

In 2014, RM295.8 million was invested in 17 approved projects in Malaysia. RM161.4 million (54.5%) came from foreign sources while RM134.6 million (45.5%) were domestic. These projects are expected to create 276 high-income jobs.

SHARE OF INVESTMENTS IN APPROVED R&D PROJECTS, 2014



Of the 17 projects, 11 came from companies that were given approved tax incentives for Contract R&D, three were for approved In-house R&D and three companies were awarded R&D Status. Approved Contract R&D projects made up the lion's share of investments at RM227.9 million, of which RM87.3 million came from domestic sources while RM140.6 million were foreign. These Contract R&D projects will generate 185 high-income jobs. One significant R&D project with approved investments of RM36.0 million will undertake R&D on oleochemical products in the application of fatty esters outside of Europe. The project is



expected to create 20 high-income jobs for Malaysians and generate significant spin-offs to other oleochemical downstream industries in Malaysia.

Three companies were approved for in-house R&D on the subject of advanced fibre optics and packaging technology, as well as the production of a carbonising system with proposed investments of RM65.3 million. The three remaining companies were awarded R&D Status for providing dedicated R&D Services to their clients. One of these approved projects will use advanced technology to provide end-to-end solutions on glove manufacturing equipment and processes.

INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)

ICT will play an important role in making Malaysia a high-income nation. Malaysia is already in the top quartile of the world's most network-ready economies. It also ranks 30th out of 144 countries in the World Economic Forum's 2014 Global Information Technology Report.

In 2014, three projects with domestic investments of RM151.9 million were approved within the ICT sector. The first project will

provide services on medical exchanges for teleconsultation or teleradiology and cloud-based health records, while the second will provide airborne matrix, light detection and ranging (LiDAR) systems as well as digital imagery survey systems. These projects are expected to create 163 employment opportunities.

Other ICT growth areas include cloud computing, context-aware computing, networking and intelligence and creative multimedia. The 2015 Budget has allocated RM100 million for the Digital Content Industry Fund. This incentive is part of the Government's efforts to promote greater digital content development.

REAL ESTATE (HOUSING)

A total of 1,320 projects with investments of RM88.5 billion were approved in the real-estate (excluding commercial buildings) sub-sector in 2014. Almost all (97.3%) of these investments came from local sources. In comparison, a total of 1,400 projects were approved with investments amounting to RM83.3 billion in 2013.

SEARCH & RESEARCH

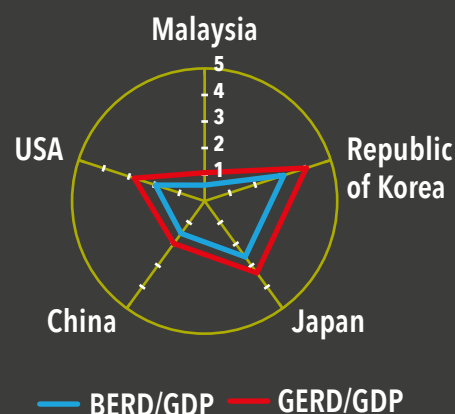
Malaysia is fast developing a culture for R&D and a reputation to go with it

R&D plays an important part in Malaysia's economic development. A study on the impact of the Commercialisation of R&D Fund (CRDF) in the Ninth Malaysia Plan found that the average multiplier for every Ringgit Malaysia spend in CRDF grants would generate RM2.25 in output, RM0.23 in income, 0.0023 persons in employment and contribute RM0.76 in value added. Numerous other studies indicate that R&D leads to greater product quality, significant improvements in productivity and greater export earnings.

With Malaysia aiming to become a developed nation with a gross expenditure on R&D (GERD) of at least 2.0% by 2020, the next few years will be very important in setting the foundations for the next stage of development. In 2011, Malaysia's spending on R&D as a proportion of GDP (the GERD/GDP ratio) stood at 1.07%. This is an impressive 67.2 per cent more than the GERD/GDP ratio achieved in 2006, and puts Malaysia ahead of its GERD/GDP ratio target of 1.0 per cent by 2015. However, over 45 per cent of the spending in 2011 still came from public institutions of higher learning (IHLs) and the government, whereas in most of the developed world, public spending only accounts for between 25-to-33 per cent of total R&D funding. Business expenditure on R&D (BERD) in Malaysia still only comprised 56.1 per cent of gross expenditure in 2011, far behind benchmark countries such as Republic of Korea (77.9%), Japan (77.6%), China (76.3%) and the USA (69.9%).

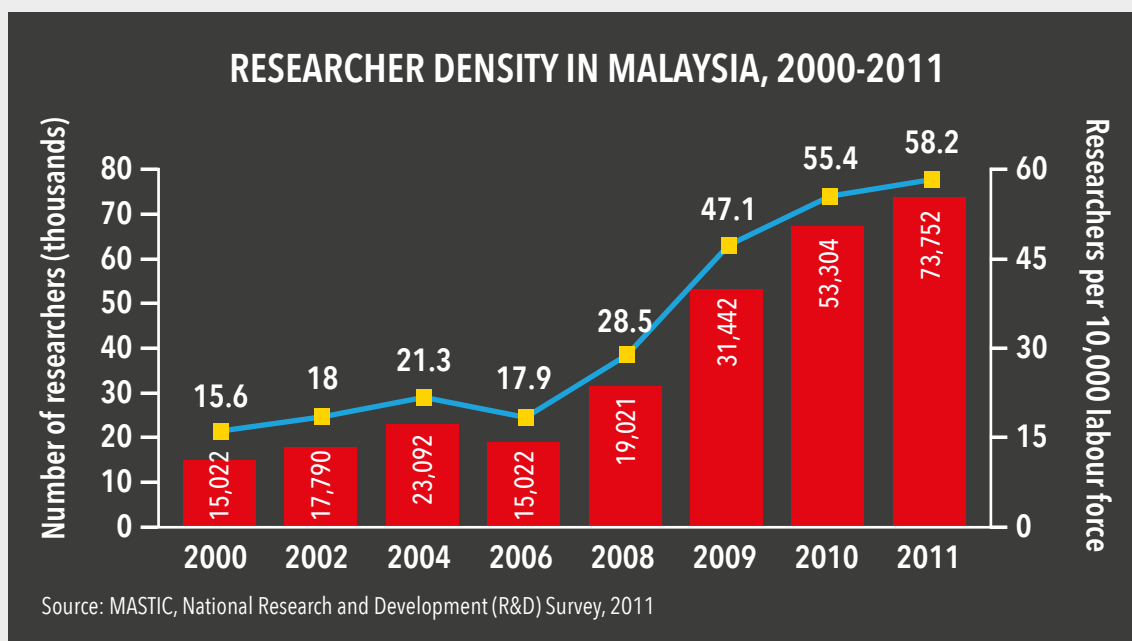
Nonetheless, Malaysia is making important inroads in establishing a strong culture of R&D as the latest rankings in the Global Competitiveness Index show - Malaysia rose four places to rank 20th out of 144 countries thanks to improved scores in the Innovation Pillar. Applications for patents and industrial designs have also surged by over 50 per cent over the past decade, from 6,386 applications in 2003 to 9,642 in 2014.

GERD AND BERD AS A % OF GDP, MALAYSIA VS SELECTED COUNTRIES, 2014



Much of this success stems from the country having developed R&D collaborations between corporations and academia. The Government also offers attractive incentives for R&D, particularly within target industries such as biotechnology, advanced petrochemicals, oleochemicals, advanced materials, rubber and E&E. In 2014, a total of 17 projects were approved with R&D incentives with total investments of RM295.8 million, down 25.7 per cent from RM398.1 million in 2013. Of the total investments in 2014, RM161.4 million (54.5%) came from foreign sources while RM134.6 million (45.5%) were domestic.

With global economic focus shifting to Asia and the ASEAN community, the country must be ready for businesses seeking R&D services within the region. It must also be able to provide investors with the infrastructure and human capital they need to invest in R&D operations. The Government will do its part to provide the private sector with a strong IP protection regime and nurturing business environment for research. However, Malaysia's private enterprises must do their part and step up to the challenge in leading the country's R&D agenda.



A new beginning for manufacturing

Although the services sector is able to create high-income job opportunities, sustainable development within the manufacturing sector is only possible if it has an active R&D environment. R&D spending has increased rapidly over the past decade within the service sub-sectors of ICT and engineering, but there have also been noticeable increased in manufacturing-led sectors such as natural sciences, biotechnology, agriculture and forestry. The government's push for R&D in agriculture and forestry is significant because the country has some of the best R&D institutions in the world within areas such as rubber and palm oil. Within the private sector, however, R&D interest mainly revolves around generic bio-similars (in pharmaceuticals) as well as solar and other renewable energy – all of which are proving to be very attractive industries in Malaysia.

As far as developing its capacity for R&D goes, the biggest challenge that Malaysia faces is in building a critical mass of talent. The problem is a mismatch in supply and demand: companies that need R&D services will only look to a country that has the expertise capable of providing those services, but expertise will only want to work in countries where there is a demand for

their services. Unfortunately, Malaysia's best and brightest R&D talent is scattered all over the world.

MIDA along with other government agencies is working hard to create opportunities for these talented Malaysians so that they will find careers at home that are just as fulfilling as the ones they have found abroad. Investments into R&D-intensive projects go a long way towards reassuring Malaysian R&D specialists that Malaysia is ready to provide them a place to grow. The country has made some progress towards this goal already, with the ratio of researchers per 10,000 workers more than tripling from 15.6 in 2000 to 58.2 in 2011. However, this is still only 1,643 researchers per million population, far behind Singapore (6,494), Republic of Korea (5,928) and the USA (3,979).

The Government's institutional structure supports the country's thrust for innovation and R&D at the highest levels, with the National Innovation Council (NIC) being chaired by the Prime Minister in consultation with Malaysian Innovation Agency. Various other ministries and government agencies support and execute the policy initiatives established by the NIC including the Ministry of Science, Technology and Innovation (MOSTI) and the Malaysian Technology Development Corporation (MTDC).

TRANSPORT

Covering maritime transport, aviation and highway construction and maintenance, a total of 78 projects were approved with investments of RM6.1 billion in 2014. Domestic investments amounted to RM5.9 billion (96.7%) while foreign investments came to RM228.9 million (3.3%). A total of 2,211 jobs are expected to be created by these projects.

Most of the year's investments were in the maritime transport sub-sector, with 17 projects valued at RM331.4 million. Another 51 projects were approved in the aviation sub-sector with investments amounting to RM3.3 billion.

TELECOMMUNICATIONS

The telecommunications sub-sector covers network facilities, network services, application services (including content application services), post and broadcasting. A total of RM4.5 billion was invested into this sub-sector in 2014, all of which are approved domestic investments. In comparison, investments approved in the telecommunications sub-sector in 2013 amounted to RM8.7 billion.

UTILITIES

Energy utilities include the generation, transmission and distribution of electricity by Tenaga Nasional Berhad, Syarikat SESCO Bhd (SESCO) and Sabah Electricity Sdn Bhd (SESB). Water utility services are offered by Suruhanjaya Perkhidmatan Air Negara (SPAN) and Pengurusan Aset Air Berhad (PAAB).

In 2014, total investments in this sub-sector amounted to RM9.0 billion. All utility investments came from domestic sources.

FINANCIAL SERVICES

The financial services sub-sector covers banking, insurance and capital markets, including fund management, investment advisory services, financial planning services, venture capitalists and brokerage services. Investments in this sub-sector in 2014 surged to RM6.9 billion from RM3.1 billion in 2013. This growth was bolstered by domestic investments amounting to RM5.3 billion (76.8%) and foreign investments totalling RM1.6 billion (23.2%). The banking segment remained the largest

contributor to this sub-sector with RM6.6 billion (95.7%) in investments, mostly thanks to Islamic banking activities which registered RM2.8 billion in investments. Investments in insurance and capital markets stood at RM251.3 million and RM7.2 million respectively.

DISTRIBUTIVE TRADE

The distributive trade sub-sector consists of wholesale and retail trade, hypermarkets and supermarkets, department stores and direct selling, franchising and projects approved under the Petroleum Development Act (PDA), 1974 (petrol stations and kiosks).

Investments in this sub-sector grew by 74 per cent year-on-year to RM8.7 billion compared with RM5.0 billion recorded for the whole of 2013. Compared to 2013, these investments were led by foreign interests, which increased from RM1.6 billion to RM5.0 billion. Domestic investments also increased by 8.8 per cent from RM3.4 billion in 2013 to RM3.7 billion in 2014.

EDUCATION SERVICES

A total of 467 projects were approved in this sub-sector in 2014 involving investments of RM1.64 billion. Domestic investments amounted to RM1.55 billion (95.2%) while foreign investments totalled RM78.5 million (4.8%). In comparison, 2013's total investments amounted to RM2.1 billion in 617 projects.

The investments approved in 2014 were a mix of both new projects and expansion plans of private colleges/universities. In total, there were 37 private colleges/universities projects worth RM1.3 billion in total investments, along with 47 projects approved for skill centres with a total investment of RM305 million. Another 383 projects for other private education institutions worth RM21.4 million were also approved.

One notable project was the expansion of Institut Teknologi Petroleum Petronas (INSTEP), which now features an Upstream and Downstream Training Plant equipped with a drilling rig, refinery and petrochemical simulators, as well as an emergency response training centre to provide participants with realistic and hands-on learning. An additional 100 fully-local jobs were created upon its commissioning in March 2014 and an additional

100 jobs will be created for locals in 2015 in relation to 85 per cent of the facilities' capacity utilization. This augurs well for INSTEP's aspiration to be a centre of excellence and a centre of choice in the vocational education and training sphere.

HOTELS AND TOURISM

The hotel and tourism sub-sector attracted a total of RM6.69 billion in investments within 118 approved projects in 2014. Domestic investments accounted for 94 per cent of this total (RM6.35 billion), while foreign investments made up the rest (RM340 million).

One major approved project involves a world-class outdoor 'live performance' project which will be located in Melaka. 'Impression', a world renowned international performance brand from China (comparable to the likes of Disneyland and Universal Studios), will be the first Impression series performed on non-Chinese shores. It will incorporate modern art concepts involving stage performances with high-tech lighting and sound systems along with a 360°-rotation theatre.



HEALTHCARE SERVICES

The healthcare services sub-sector covers the establishment of private healthcare institutions, including private hospitals and private ambulatory care centres. A total of 22 projects were approved in this sub-sector in 2014 with total investments of RM2.3 billion, all of which were domestic. This was an increase of approximately 21 per cent in investments compared to 2013 (RM1.9 billion for 20 projects).

Most of the projects approved were fully-owned by Malaysian conglomerates with good investment track records. These include the IHH Healthcare Group, KPJ Group, Sunway Group and Ramsay Sime Darby Healthcare Sdn Bhd.

OTHER SERVICES

In 2014, six projects were approved with total investments of RM4.0 billion in other high-value industries within the services sector. A total of RM1.7 billion of these investments came from domestic sources, while RM2.3 billion came from foreign sources. The projects are expected to create 267 employment opportunities within the sector.

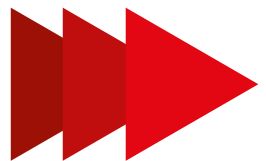
One major project includes the development of a technological park in Nusajaya with a total investment of RM3.3 billion. This fully integrated green park will provide a landscape with a built environment for a multitude of industries such as electronics, pharmaceuticals and medical devices, food processing, precision engineering, fast moving consumer goods, logistics and warehousing.

The year 2014 also witnessed huge investments in the development of premium outlets. Two projects were approved with investments amounting to RM491 million, of which RM253 million came from domestic investors while RM237 million came from foreign investors. These projects are in line with the Tourism NKRA under the Government's Economic Transformation Programme, and are expected to generate 113 high-income employment opportunities. The premium outlets aim to attract more tourists and increase tourist spending by offering discounted luxury items, complementing existing retail offerings and supporting the country's goal of becoming Asia's leading shopping destination.

LOOKING EAST



*If you want to be in Asia, look
no further than Malaysia.*



• • • • •



The Nusajaya Bio-XCell biotech park and eco-system is an integrated utilities facility that supplies steam and chilled water to industries. It was developed by Malaysian Bio-XCell Sdn Bhd, which hopes to start electricity generation in May 2015.

FOR MUCH OF THE PAST CENTURY, WESTERN corporations have outsourced the bulk of their manufacturing work to low-cost labour countries in the Far East such as China, Philippines and Vietnam. But rapidly rising wages in the developing world as well as the escalating risks and costs of long-haul transportation are changing the economics of this offshoring model. Western firms are beginning to realise that it is now often cheaper to manufacture their products at home, giving them greater control over their businesses.

This “reshoring” trend is changing the way Malaysia and the rest of world economy relates to Western capitalism. Large corporations are using innovative technologies and rejigging their manufacturing processes to even out the cost differences between onshore and offshore manufacturing, often with very good results. Even when the economics of these decisions do not make sense, these businesses are willing to consider alternative, medium-wage manufacturing hubs that are at least on the same continent – many US businesses consider Mexico and Latin America as viable options for such “nearshoring”.

Besides the prospect of reducing costs, the American and European businesses that are actively exploring these reshoring and nearshoring options want to simplify their supply chains and get closer to their home customers – something that they have never been able to do. They know they can offset the higher wages they pay at home by eliminating shipping costs, import taxes and other offshore-related expenses. For businesses whose largest customer base is in Asia, however, it makes more sense to stay put.

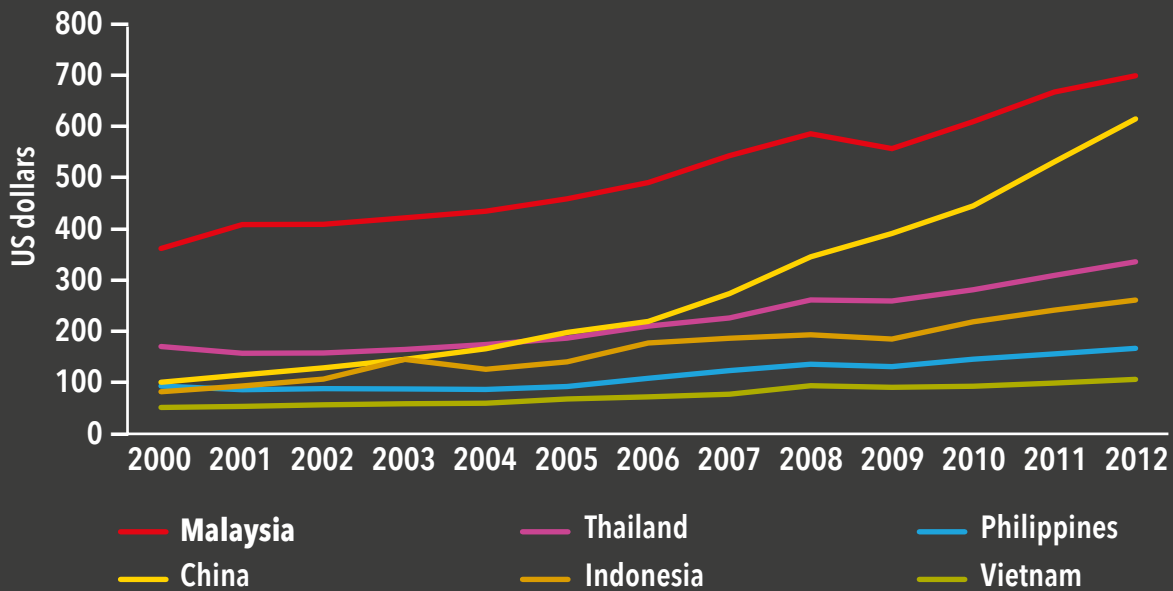
Smart businesses are trying to do both. Well-established MNCs are reshoring some facilities back to their home bases while leaving the rest where they are, especially if those facilities are in Asia. New businesses with a solid customer base at home are eager to expand abroad despite the rising costs of offshoring. Both new and old corporations recognise that all the benefits offered by reshoring are ultimately outweighed by one, unassailable fact: Asia is the world’s fastest growing consumer market.

EY, a consultancy, estimates that emerging Asia already accounts for one quarter of the global consumer products market. The Organisation for Economic Cooperation and Development (OECD) reckons that Asia will represent 66 per cent (2009: 28%) of the global middle-class population and 59 per cent (2009: 23%) of middle-class consumption by 2030. This means that the world’s biggest consumer market will soon be right in Malaysia’s backyard.

MALAYSIA, TRULY ASIA

If you wanted to build a shop in the world’s biggest consumer market, where would you build it?

AVERAGE MONTHLY WAGES FOR SELECTED COUNTRIES, 2000-2012 (US dollars)



Source: Economist Intelligence Unit (EIU)

The location would have to be cost-effective and offer all the infrastructure and talent you need. It should also have a stable government with a solid track record for pro-business policies. Ideally, it should already be host to several other businesses that are similar to your own in size and scope and which are doing well. If the country offered business-friendly incentives, that would help, too.

If you want to be in Asia, look no further than Malaysia.

Rising wages in China means that it is gradually losing its edge as a low-cost labour hub. This is bad news for companies that have relied on labour-intensive productivity models to keep costs low. The good news is that these companies now have no excuse not to invest into higher-skilled, capital-intensive productivity models.

Malaysia is a very good option for companies seeking to make such shifts into more advanced methods of production, and several companies have already moved their facilities from China and Japan to Malaysia and taken advantage of the Government's tax incentives for capital

investments. UNCTAD predicts that despite the risks of slowing global economic growth and geopolitical instability, the recovery of the US economy will nonetheless encourage businesses to explore their investment options.

With most Western financial instruments only able to offer marginal or even negative interest rates, transnational corporations (TNCs) with record-levels of cash holdings are expected to channel parts of their funds into strategic investments in developing countries. The challenge for Malaysia in 2015 will be to convince these corporations that Malaysia is the best place to be in Asia, and that the ASEAN Economic Community (AEC) is the best place for businesses to prepare for the Asian consumer boom.

All things remaining equal, Malaysia will maintain its allure as one of Asia's premier investment destinations despite the troubles in Europe and the reshoring of US businesses. Although the threat of a Greek exit from the European Union remains a hazard to the region's political stability, the European Central Bank's (ECB) affirmative monetary policy will no doubt encourage growth on the continent

and help allay fears of deflation. The European Commission has forecasted that GDP will grow 1.3 per cent in 2015, which would make it the euro zone's best performance since 2010.

The recovery of the US economy also bodes well for the global investment climate. Falling unemployment and rising real wages will boost global demand and trigger a rise in exports across in all of the republic's major trading partners – Malaysia included. Stronger than expected growth in Germany, Spain and Britain in 2014 will also fuel affirmative investor action. Even Japan is showing signs of bouncing out of a sudden recessionary dip after its GDP grew by a 2.2 per cent in the final quarter of 2014.

There is also the silver lining in the cloud of lower world commodity prices. While many commodity-based economies were badly hurt by the decline in prices for crude oil and other commodities in 2014, the slump in prices should nonetheless lead to a boost in consumer spending that will more than compensate for any downturn in investments. Malaysia's own GDP grew by 5.8 per cent in the fourth quarter of 2014, thus allaying fears that the fall in crude oil prices would send the country into economic shock in the last quarter of the year. The slightly cheaper ringgit will also be a factor in attracting investors to Malaysian shores. Year-on-year, both land and labour in Malaysia are cheaper to foreign investors than they were a year ago. A cheaper ringgit also makes Malaysian exports more competitive, which is a further incentive for businesses to invest into the country.

ASEAN CALLING

Finally, there is the irresistible draw of the ASEAN Economic Community (AEC). Despite recent financial volatility, the combined economic output of ASEAN has more than tripled since 2003, reaching USD2.4 trillion by the end of 2013. A survey by the Boston Consulting Group found that about 80 per cent of companies are optimistic about ASEAN integration and believe that it will accelerate economic growth in their industries. More than 70 per cent of companies surveyed were already working to increase penetration in their current Southeast Asian markets, and around 90 percent of companies based in Malaysia expect to expand their regional footprints over the next five years. The BCG report also notes that the governments of Malaysia and Singapore have

implemented the greatest number of measures to boost the competitiveness of domestic companies ahead of the AEC integration deadline.

There is much to say about ASEAN that ASEANites themselves may not be fully aware of. The first is that Southeast Asian banking systems are now among the most solid in the world after the reforms the region implemented during the 1997-1998 financial crisis. Government debt as a percentage of GDP among the region's biggest economies is well below the global average. Productivity growth in the region is oustripping other rapidly developing economies such as Brazil, Mexico and India. It is these solid fundamentals that have helped ASEAN rise above the economic volatility experienced in so many other parts of the world over the past few years.

As the 'single window' for investment into Malaysia, MIDA will further enhance its central coordination functions and increase the visibility of cross-agency functions, roles and incentives. Investment promotion activities in 2015 will be more strategic and comprehensive. The Government will continue to introduce various measures to enhance Malaysia's competitiveness to face domestic and external challenges and opportunities, including those presented by ASEAN economic integration. These measures will include fine-tuning its investment policies, enablers, fiscal and non-fiscal incentives as well as continuously collaborating and engaging with industry players and stakeholders to attract investors in all economic sectors. The focus will also be more on attracting quality investment projects, without discounting the importance of investment volume.

ASEAN has become a region that global companies can ill afford to ignore. Through trade and investment, private enterprise will bind the region together with or without new government action. The chief challenge for Southeast Asian companies and multinationals alike is to get into pole position to capitalise on the growing opportunities the AEC will present. As the BCG report puts it, "Regardless of whether the AEC goals are achieved on schedule, the process of integration has gained momentum of its own, driven by a private sector that recognises the region's growing opportunities."

APPENDICES

Appendix 1 Approved Manufacturing Projects, 2014 and 2013

	2014			2013		
	New	Expansion/ Diversification	Total	New	Expansion/ Diversification	Total
Number	450	361	811	463	324	787
Employment	44,926	33,417	78,343	53,791	39,197	92,988
Total Capital Investment (RM million)	43,468.6	28,384.0	71,852.7	38,093.5	14,007.6	52,101.1
Domestic (RM million)	23,929.7	8,330.2	32,260.0	15,287.5	6,277.3	21,564.8
Foreign (RM million)	19,538.9	20,053.8	39,592.7	22,806.1	7,730.3	30,536.4

Appendix 2 New Manufacturing Projects Approved by Size of Capital Investment, 2014 and 2013

Size Of Capital Investment		2014				2013					
		No.	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No.	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Less Than RM 2.5 million		48	1,467	61.5	7.3	68.9	63	2,431	87.5	3.0	90.5
RM 2.5 million - < RM 5.0 million		62	2,772	186.6	42.0	228.6	53	3,244	153.9	41.5	195.4
RM 5.0 million - < RM 10.0 million		110	7,286	670.9	139.0	809.8	118	7,285	612.9	213.1	826.0
RM10.0 million - < RM 50.0 million		158	14,029	2,407.3	955.7	3,363.1	152	13,995	1,890.3	1,184.4	3,074.8
RM50.0 million - < RM100.0 million		27	3,660	761.0	1,063.4	1,824.4	32	4,491	1,078.5	1,184.9	2,263.4
RM100.0 million - < RM500.0 million		32	6,109	3,569.5	4,329.2	7,898.7	26	6,654	2,078.6	2,728.6	4,807.3
RM500.0 million - < RM 1.0 billion		3	887	936.1	1,058.1	1,994.2	6	1,911	1,426.5	2,190.3	3,616.8
RM 1.0 billion And Above		10	8,716	15,336.9	11,944.1	27,281.0	13	13,780	7,959.1	15,260.3	23,219.4
Total		450	44,926	23,929.7	19,538.9	43,468.6	463	53,791	15,287.5	22,806.1	38,093.5

Appendix 3 Approved Manufacturing Projects by Industry, 2014 and 2013

Industry	2014						2013			
	No.	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No.	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Petroleum Products (Inc. Petrochemicals)	19	1,581	11,255.3	4,726.5	15,981.8	7	655	2,926.8	3,243.8	6,170.6
Electronics & Electrical Products	96	16,700	724.6	10,422.6	11,147.2	118	25,380	1,319.3	8,495.6	9,815.0
Chemical & Chemical Products	83	4,709	3,046.5	7,704.2	10,750.8	68	3,966	2,035.3	3,758.0	5,793.3
Basic Metal Products	33	7,133	1,974.9	7,969.1	9,944.0	35	3,492	1,147.3	4,425.8	5,573.1
Transport Equipment	56	6,873	3,747.8	1,867.7	5,615.5	73	9,169	4,446.4	2,160.4	6,606.8
Non-Metallic Mineral Products	30	2,711	2,149.4	1,299.5	3,448.9	33	2,636	932.5	1,339.2	2,271.7
Food Manufacturing	67	4,788	1,299.2	1,547.9	2,847.1	73	6,159	2,056.1	2,297.7	4,353.8
Machinery & Equipment	98	4,568	1,758.3	720.6	2,478.9	90	4,726	771.2	1,205.0	1,976.2
Fabricated Metal Products	101	5,156	1,420.6	793.7	2,214.2	73	4,020	594.7	812.0	1,406.7
Scientific & Measuring Equipment	38	5,475	1,058.3	754.1	1,812.4	37	6,085	775.7	560.1	1,335.7
Rubber Products	19	3,579	1,381.1	289.4	1,670.5	20	12,711	2,833.5	794.5	3,628.0
Textiles & Textile Products	17	2,260	597.5	635.7	1,233.2	16	1,493	132.1	632.5	764.6
Paper, Printing & Publishing	17	2,144	348.5	555.8	904.3	22	2,253	506.3	68.2	574.5
Plastic Products	51	4,278	755.2	129.2	884.4	44	3,334	437.9	410.2	848.1
Wood & Wood Products	47	2,510	295.4	52.3	347.8	26	2,009	321.4	36.9	358.3
Furniture & Fixtures	19	1,714	223.3	12.4	235.8	39	4,132	249.4	10.0	259.4
Beverages & Tobacco	8	1,007	161.1	65.3	226.5	4	458	61.7	251.0	312.6
Leather & Leather Products	2	194	21.4	0.5	21.9	1	10	4.8	1.4	6.2
Miscellaneous	10	963	41.4	46.1	87.5	8	300	12.6	33.9	46.6
Total	811	78,343	32,260.0	39,592.7	71,852.7	787	92,988	21,564.8	30,536.4	52,101.1

Appendix 4 Approved Manufacturing Projects with Investments of RM100 Million and above, 2014

Industry	New						Exp./Div.						Total					
	No.	Employ- ment	Domestic Investment (RM million)	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No.	Employ- ment	Domestic Investment (RM million)	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No.	Employ- ment	Domestic Investment (RM million)	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Petroleum Products (Inc. Petrochemicals)	6	1,350	11,082.6	4,189.5	15,272.2	2	23	120.4	463.4	583.8	8	1,373	11,203.0	4,652.9	15,856.0			
Electronics & Electrical Products	4	1,498	-	1,916.8	1,916.8	9	5,286	211.5	7,374.0	7,585.6	13	6,784	211.5	9,290.8	9,502.4			
Basic Metal Products	4	4,773	176.9	6,010.1	6,187.0	6	1,148	1,547.6	1,731.9	3,279.5	10	5,921	1,724.5	7,741.9	9,466.5			
Chemical & Chemical Products	9	1,308	2,164.5	1,695.1	3,859.7	2	364	-	5,352.0	5,352.0	11	1,672	2,164.5	7,047.1	9,211.7			
Transport Equipment	5	3,436	2,861.6	1,457.4	4,319.0	2	200	104.0	170.3	274.3	7	3,636	2,965.6	1,627.7	4,593.3			
Non-Metallic Mineral Products	4	882	1,256.1	930.6	2,186.7	2	80	544.9	138.4	683.3	6	962	1,801.0	1,069.0	2,870.0			
Food Manufacturing	4	639	214.3	323.9	538.2	7	777	423.6	815.2	1,238.8	11	1,416	637.9	1,139.1	1,777.0			
Rubber Products	2	512	1,110.0	-	1,110.0	3	2,127	147.0	256.8	403.8	5	2,639	1,257.0	256.8	1,513.8			
Machinery & Equipment	1	90	-	373.9	373.9	1	336	1,063.3	44.3	1,107.6	2	426	1,063.3	418.2	1,481.5			
Textiles & Textile Products	.	.	-	-	-	3	1,348	516.9	549.2	1,066.1	3	1,348	516.9	549.2	1,066.1			
Scientific & Measuring Equipment	4	904	617.0	334.5	951.5	1	1,447	-	113.0	113.0	5	2,351	617.0	447.5	1,064.5			
Fabricated Metal Products	2	320	359.4	99.6	459.0	2	56	137.5	160.6	298.1	4	376	496.9	260.2	757.1			
Paper, Printing & Publishing	.	.	-	-	-	1	897	-	471.8	471.8	1	897	-	471.8	471.8			
Beverages & Tobacco	.	.	-	-	-	1	45	41.7	65.3	107.1	1	45	41.7	65.3	107.1			
Total	45	15,712	19,842.4	17,331.5	37,173.9	42	14,134	4,858.5	17,706.2	22,564.7	87	29,846	24,701.0	35,037.7	59,738.6			

Appendix 5 Approved New and Expansion/ Diversification Manufacturing Projects by Industry, 2014 and 2013

Industry	2014						2013					
	New			TOTAL			New			Exp./Div.		
	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)
Petroleum Products (Inc. Petrochemicals)	10	15,288.0	9	693.8	19	15,981.8	4	4,328.2	3	1,842.4	7	6,170.6
Electronics & Electrical Products	29	2,426.3	67	8,720.9	96	11,147.2	44	6,766.0	74	3,048.9	118	9,815.0
Chemical & Chemical Products	49	4,682.5	34	6,068.2	83	10,750.8	44	5,274.4	24	518.9	68	5,793.3
Basic Metal Products	21	6,554.3	12	3,389.7	33	9,944.0	26	5,006.9	9	566.2	35	5,573.1
Transport Equipment	31	4,871.3	25	744.2	56	5,615.5	35	4,959.4	38	1,647.5	73	6,606.8
Non-Metallic Mineral Products	18	2,499.9	12	949.0	30	3,448.9	19	1,536.5	14	735.2	33	2,271.7
Food Manufacturing	42	1,201.2	25	1,646.0	67	2,847.1	48	3,174.1	25	1,179.8	73	4,353.8
Machinery & Equipment	58	970.7	40	1,508.2	98	2,478.9	56	892.0	34	1,084.1	90	1,976.2
Fabricated Metal Products	57	1,301.9	44	912.4	101	2,214.2	51	772.5	22	634.2	73	1,406.7
Scientific & Measuring Equipment	14	1,137.4	24	675.0	38	1,812.4	16	931.4	21	404.3	37	1,335.7
Rubber Products	10	1,162.7	9	507.8	19	1,670.5	8	2,341.2	12	1,286.8	20	3,628.0
Textiles & Textile Products	6	33.6	11	1,199.6	17	1,233.2	8	599.7	8	164.9	16	764.6
Paper, Printing & Publishing	8	198.2	9	706.1	17	904.3	13	225.0	9	349.4	22	574.5
Plastic Products	36	628.0	15	256.5	51	884.4	30	615.8	14	232.2	44	848.1
Wood & Wood Products	32	209.2	15	138.6	47	347.8	23	330.3	3	28.0	26	358.3
Furniture & Fixtures	14	135.2	5	100.5	19	235.8	31	193.0	8	66.4	39	259.4
Beverages & Tobacco	6	85.9	2	140.6	8	226.5	2	113.0	2	199.7	4	312.6
Leather & Leather Products	1	18.5	1	3.4	2	21.9	1	6.2	.	-	1	6.2
Miscellaneous	8	63.9	2	23.6	10	87.5	4	27.9	4	18.6	8	46.6
Total	450	43,468.6	361	28,384.0	811	71,852.7	463	38,093.5	324	14,007.6	787	52,101.1

Appendix 6 Approved Manufacturing Projects with Malaysian Majority* Ownership by Industry, 2014 and 2013

Industry	2014						2013					
	New			Exp./Div.			New			Exp./Div.		
	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)
Petroleum Products (Inc. Petrochemicals)	8	14,957.8	3	39.0	11	14,996.8	2	2,358.1	2	301.8	4	2,659.9
Transport Equipment	24	3,979.9	17	570.5	41	4,550.4	26	4,089.0	26	1,093.5	52	5,182.5
Chemical & Chemical Products	34	3,123.7	18	390.3	52	3,514.0	26	1,612.1	12	365.1	38	1,977.2
Non-Metallic Mineral Products	11	1,358.5	7	753.3	18	2,111.9	12	868.4	5	404.1	17	1,272.5
Machinery & Equipment	48	422.9	32	1,423.7	80	1,846.6	38	532.7	20	243.0	58	775.7
Fabricated Metal Products	47	1,042.0	35	524.8	82	1,566.8	34	357.8	12	251.6	46	609.4
Rubber Products	10	1,162.7	7	246.2	17	1,408.9	7	2,288.1	9	824.4	16	3,112.4
Food Manufacturing	33	707.3	13	637.1	46	1,344.4	39	1,548.7	17	531.6	56	2,080.3
Scientific & Measuring Equipment	10	774.3	14	410.6	24	1,184.9	13	619.7	16	171.1	29	790.8
Basic Metal Products	11	149.1	9	770.0	20	919.2	14	1,011.1	7	329.2	21	1,340.3
Electronics & Electrical Products	14	200.4	20	584.2	34	784.5	29	487.5	21	502.5	50	989.9
Plastic Products	30	538.2	12	226.2	42	764.3	24	459.0	8	82.6	32	541.6
Textiles & Textile Products	6	33.6	6	695.4	12	729.0	6	64.8	2	52.9	8	117.7
Paper, Printing & Publishing	8	198.2	7	194.4	15	392.6	9	153.0	9	349.4	18	502.4
Wood & Wood Products	28	176.9	14	123.8	42	300.7	20	308.8	2	10.0	22	318.9
Furniture & Fixtures	13	128.1	4	100.5	17	228.6	30	190.9	7	60.9	37	251.7
Beverages & Tobacco	6	85.9	1	33.5	7	119.4	-	-	1	12.4	1	12.4
Leather & Leather Products	1	18.5	1	3.4	2	21.9	1	6.2	-	-	1	6.2
Miscellaneous	7	41.4	-	-	7	41.4	2	4.7	2	6.4	4	11.1
Total	349	29,099.5	220	7,726.7	569	36,826.2	332	16,960.4	178	5,592.6	510	22,553.0

* Projects with Malaysian equity ownership of more than 50 per cent.

Appendix 7 Approved Projects in the Engineering Supporting Industry by Sub-Sector, 2014

Sub-sector	New				Expansion/Diversification				Total			
	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Moulds, Tools & Dies	10 420	69.2	13.7	83.0	9 532	26.8	117.3	144.1	19 952	96.0	131.0	227.0
Machining	17 826	163.5	115.1	278.6	19 451	134.6	27.9	162.5	36 1,277	298.1	143.0	441.0
Stamping	2 77	7.1	0.0	7.1	1 12	0.0	9.0	9.0	3 89	7.1	9.0	16.1
Casting	1 70	7.6	1.0	8.6	2 438	5.5	276.5	282.0	3 508	13.0	277.6	290.6
Surface Engineering	4 308	59.4	12.9	72.3	2 27	8.3	-	8.3	6 335	67.8	12.9	80.7
Jigs & Fixtures	1 80	10.9	1.2	12.1	-	-	-	-	1 80	10.9	1.2	12.1
Total	35 1,781	317.7	143.9	461.6	33 1,460	175.1	430.7	605.9	68 3,241	492.8	574.7	1,067.5

Appendix 8 Approved Projects in the Electrical & Electronics Industry by Sub-Sector, 2014

Sub-sector	New				Expansion/Diversification				Total			
	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	No. Employ-ment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Consumer Electronics	2 119	13.9	-	13.9	12 341	54.7	306.5	361.2	14 460	68.5	306.5	375.0
Electronic Components	4 889	20.6	81.1	101.7	19 5,518	321.0	5,415.4	5,736.4	23 6,407	341.6	5,496.5	5,838.1
Industrial Electronics	10 3,489	52.0	2,034.5	2,086.5	11 1,862	17.3	1,021.5	1,038.9	21 5,351	69.4	3,056.0	3,125.4
Electrical Appliances	2 218	4.0	15.0	19.0	3 356	16.3	2.1	18.3	5 574	20.3	17.1	37.3
Industrial Electrical	3 93	15.8	38.3	54.0	9 972	41.0	198.6	239.5	12 1,065	56.7	236.8	293.5
Electrical Components	8 989	68.3	82.9	151.2	13 1,854	99.9	1,226.7	1,326.6	21 2,843	168.1	1,309.6	1,477.8
TOTAL	29 5,797	174.6	2,251.7	2,426.3	67 10,903	550.1	8,170.8	8,720.9	96 16,700	724.6	10,422.6	11,147.2

Appendix 9 Manufacturing Projects Approved with Foreign Participation by Source, 2014 and 2013

Country	2014			2013		
	No.	Foreign Investment (RM million)	No.	No.	Foreign Investment (RM million)	
Japan	55	10,869.9	55	3,591.9		
Singapore	121	7,821.7	126	4,522.3		
China	24	4,751.7	22	3,017.7		
Germany	13	4,416.8	17	1,717.0		
Korea, Rep.	11	1,549.0	13	5,478.8		
USA	23	1,350.1	19	6,320.6		
Ireland	2	1,143.0	0	-		
Italy	1	1,060.8	6	36.2		
Netherlands	11	816.4	11	2,382.0		
India	13	789.3	1	9.6		
United Arab Emirates	3	767.3	2	110.7		
Taiwan	30	692.1	18	131.0		
South Africa	1	681.1	1	0.9		
Switzerland	12	565.1	10	249.6		
United Kingdom	8	393.1	9	489.8		
Thailand	3	361.2	3	105.0		
British Virgin Islands	6	295.3	2	159.8		
Australia	10	213.0	9	167.0		
Others	69	1,055.6	82	2,046.4		
Total ***	-	39,592.7	-	30,536.4		

Numbers of project approved are not totalled to avoid double counting

Appendix 10 Approved Manufacturing Projects by State, 2014 and 2013

State	2014						2013					
	New			TOTAL			New			Exp./Div.		
	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)	No.	Total Capital Investment (RM million)
Johor D.T.	102	17,931.9	77	3,244.4	179	21,176.4	119	11,657.9	78	2,786.7	197	14,444.6
Sarawak	8	1,839.4	10	7,800.6	18	9,640.0	16	8,057.1	5	219.3	21	8,276.4
Pulau Pinang	74	2,609.4	95	5,553.0	169	8,162.4	58	1,400.8	61	2,511.5	119	3,912.3
Selangor D.E.	145	3,744.0	84	3,298.3	229	7,042.3	148	7,349.4	80	2,483.6	228	9,833.0
Kedah D.A.	22	961.2	28	4,324.1	50	5,285.2	21	2,114.4	18	420.2	39	2,534.5
Pahang D.M.	12	4,413.5	6	786.9	18	5,200.4	10	702.6	7	2,116.2	17	2,818.9
Melaka	13	3,867.7	15	651.9	28	4,519.6	8	745.1	19	748.5	27	1,493.7
Negeri Sembilan D.K.	24	1,882.4	17	1,212.5	41	3,094.9	27	1,532.8	8	155.1	35	1,687.9
Sabah	17	2,539.0	6	378.7	23	2,917.7	14	2,778.1	11	656.0	25	3,434.1
Perak D.R.	11	702.6	15	1,005.4	26	1,708.0	25	541.2	29	1,820.0	54	2,361.2
Terengganu D.I.	9	1,455.6	4	112.5	13	1,568.0	6	151.4	2	32.7	8	184.1
Kelantan D.N.	6	1,240.8	1	2.0	7	1,242.8	4	981.0	1	14.5	5	995.5
Perlis I.K.	1	210.0	1	2.9	2	212.9	2	42.3	1	2.0	3	44.3
W.P. - Kuala Lumpur	5	42.1	1	6.9	6	49.0	5	39.4	4	41.3	9	80.8
W.P.- Labuan	1	29.1	1	4.0	2	33.1	.	-	.	-	.	-
Total	450	43,468.6	361	28,384.0	811	71,852.7	463	38,093.5	324	14,007.6	787	52,101.1

Appendix 11 Approved Investments in Various Service Sub-Sectors, 2014 and 2013

Sub-sector	2014			2013		
	No.	Employment	Total Investment (RM million)	No.	Employment	Total Investment (RM million)
Real Estate (Housing)	1,321	NA	88,558.9	1,400	NA	83,314.2
Utility	NA	122	9,046.1	NA	10	9,063.3
Distributive Trade	1,866	55,075	8,665.8	1,397	37,360	5,002.7
Financial Services	50	124	6,871.0	63	348	3,106.5
Hotel & Tourism	118	8,914	6,689.8	122	7,296	7,025.6
Transport	78	2,211	6,128.6	63	2,165	7,921.5
Support Services	158	6,752	5,258.7	154	5,216	3,448.2
Telecommunications*	493	NA	4,478.7	649	NA	8,750.8
Regional Establishments	227	1,831	3,163.0	184	2,402	4,237.5
MSC Status	230	14,480	2,963.8	236	13,011	3,001.7
Global Operations Hub	7	1,268	2,437.6	9	15,877	7,947.5
Health Services	22	2,230	2,284.9	20	3,814	1,940.5
Education Services	467	4,424	1,636.5	617	7,448	2,146.3
Other Services	22	1,112	1,426.9	21	2,074	777.6
Total	5,059	98,543	149,610.3	4,935	97,021	147,683.9

Note

NA: Data not available

* January-September only

Appendix 12 Approved Investments in the Primary Sector, 2014 and 2013

Primary Sector	2014			2013		
	No.	Employment	Total Investment (RM million)	No.	Employment	Total Investment (RM million)
Mining	36	288	13,450.8	30	60	18,769.8
Plantation & Commodities	7	317	724.2	3	151	330.6
Agriculture	29	874	250.5	53	1,550	558.8
Total	72	1,479	14,425.5	86	1,761	19,659.2

NOTES

[illegible]



MIDA SENTRAL

No. 5, Jalan Stesen Sentral 5

Kuala Lumpur Sentral

50470 Kuala Lumpur, Malaysia

Tel: (603) 2267 3633

Fax: (603) 2274 7970

Website: www.mida.gov.my

E-mail: investmalaysia@mida.gov.my